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PROFESSOR V.I. SUBRAMONIAM MEMORIAL VOLUME

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The journal will be a biannual in English, to be published in the first week of January and June each year.

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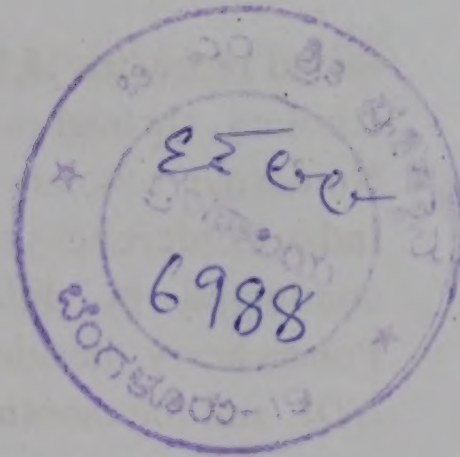
The manuscripts of articles should be submitted in *triplicate*, clearly typed on one side only, double space with wide margins, **preferably on CD or through e-mail** (dravling@md5.vsnl.net.in; ijdlisdl@gmail.com). Language data should be underlined with meanings in inverted commas. The systems of footnotes and listing of bibliography will be those adopted in *Language*. The article, if theoretically important, will be treated as in *Current Anthropology* and published with comments and replies. Twenty offprints will be issued free of cost to the author(s). Classical papers which are out-of-print will also be republished if there is a demand.



PROFESSOR V.I. SUBRAMONIAM
(1926 - 2009)

K. P. Bhar
22/07/10

International Journal of Dravidian Linguistics
Vol. 39 No. 2 June 2010



PREFATORY NOTE

The members of the International School of Dravidian Linguistics (ISDL), Dravidian Linguistics Association (DLA) and the International Journal of Dravidian Linguistics (IJDL) have assembled in the ISDL Conference room on 29th June 2009 at 6 p.m. to express their deep condolences on the sad demise of the Founder of these academic institutions, Professor Dr. V.I. Subramoniam after the cremation of his body in the ISDL campus as per his last wish. After the obsequies of taking away the ashes from the cremation site by Prof. Subramoniam's son Mr. Arun Subramoniam and other family members, a meeting of the office bearers and members of the DLA, ISDL and IJDL was held at the Conference room on 30th June 2009 and resolved that as a mark of respect and homage to the late Professor, the 38th All India Conference of Dravidian Linguists be conducted at Thiruvananthapuram on the date that coincides with the first death anniversary of Subramoniam. Besides to commemorate his vast contributions and to draw attention to the signal nature of establishing and running the professional journal it was decided to bring out the Volume 39 No. 2 June 2010 of the IJDL as *Professor V.I. Subramoniam Memorial Volume* and to release it at the conference.

Prof. Subramoniam was a great visionary with missionary zeal who spent his whole lifetime for studies pertaining to the growth and development of Dravidian languages, linguistics, people, culture and allied fields in particular and South Asian linguistics in general in diverse ways. He took initiatives to organize and establish institutions like ISDL, DLA, IJDL in Thiruvananthapuram in Kerala, Tamil University at Thanjavur in Tamil Nadu, Pondicherry Regional Centre of ISDL which later became the Pondicherry Institute of Linguistics and Culture (PILC), Dravidian University at Kuppam in Andhra Pradesh for achieving the noble academic goals. Besides he was a promoter of other centres of excellence in learning and research.

He had introduced innovative teaching courses, undertaken challenging research projects, meticulously guided researchers on

varied branches of linguistics, identified and promoted young talented scholars throughout his academic and organizational endeavour. Numerous scholars have in one way or other benefited by the 37 All India Conferences of Dravidian Linguists and other National Seminars conducted in different parts of India, the Union territory of Pondicherry, besides the prompt publication of the last 77 issues of *IJDL* and the monthly *DLA News*.

Moreover he has left behind a great legacy in the form of research publications of international standards and perspectives as witnessed by one hundred and odd publications of DLA/ISDL including *Dravidian Encyclopaedia*, *Encyclopaedia of Dravidian Tribes*, Handbooks of Tamil Nadu, Kerala, West Bengal etc. All the institutions, the genesis and growth of which embodies the seminal role of Subramoniam stand as complementary for the establishment of a tradition of study and research in all aspects of Dravidian identity and heritage.

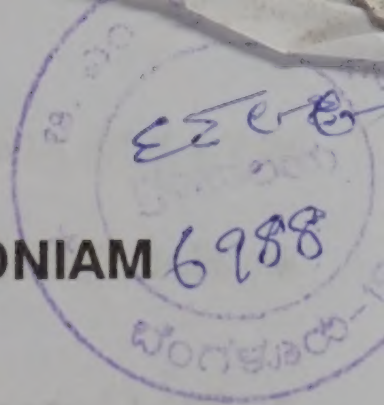
Establishing a professional journal and watching its continuous publication and steady growth over a long period is a hazardous enterprise. It is a matter of gratification to note that *IJDL* articles have been frequently cited by standard journals and periodicals dealing with Dravidian and South Asian languages and linguistics. Readers from different parts of the world have noted *IJDL* as one of the prominent journal in the field issued from India. It is exchanged with other leading journals of its kind.

This significant attainment during the past nearly four decades has been possible because of the valuable academic contributions of the scholars in India and abroad, the modest financial support received from the University of Kerala in the beginning, later by the ICSSR, the dedicated work of the Founding Editor, his associates and the readers and well-wishers who have identified themselves with the journal.

I thank all the eminent scholars who have contributed to this volume. We are extremely happy that this issue of *IJDL*, Vol. 39 No. 2 June 2010 is being released on the 17th of June 2010 at the inaugural function of the 38th All India Conference of Dravidian Linguists at V.I. Subramoniam Memorial ISDL Complex, Thiruvananthapuram, Kerala as a token of gratitude and homage to Prof. V.I. Subramoniam, the Founder-Editor of *IJDL*.

B. Gopinathan Nair
Chief Editor

A PROFILE OF PROF. V.I. SUBRAMONIAM



Bio-data

- Born on 18-2-1926 in Vadasery, Nagercoil, Kanyakumari district of Tamil Nadu.
- Father Thiru. K. Iyemperumal Pillai,
Mother Thirumathi. K. Sivakami Ammal.
- Family Married to Retnam, 2 sons, (late) S.I. Perumal, Arun Subramoniam, 2 daughters, (late) Thankom, Jaya Hariharan and 3 grandchildren.

Education

- Matriculation 1941 from S.M.R.V. Hindu High School
- Graduation 1943 from Scott Christian College, Nagercoil
- Post-graduation 1946 M.A. degree in Tamil from Annamalai University, Tamil Nadu
- Ph.D. 1957 in Linguistics with Anthropology and Historical Linguistics as minors from Indiana University, USA.

Academic and Administrative Positions Held

- Lecturer in Tamil 1947-1953, M.D.T. Hindu College, Tirunelveli, Tamil Nadu.
- Honorary Professor of Tamil 1953-1958, Travancore University, Trivandrum.
- Head of the Department of Tamil 1958-1963, University of Kerala, Trivandrum.
- Reader & Head 1963-1967, Departments of Tamil and Linguistics, University of Kerala, Trivandrum.
- Professor & Head 1967-1981, Department of Linguistics, University of Kerala.
- Vice-Chancellor 1981-1986, Tamil University, Thanjavur.

- Hon. Director 1986-2004, International School of Dravidian Linguistics, Thiruvananthapuram.
- Pro-Chancellor 1997-2000, Dravidian University, Kuppam, Andhra Pradesh.
- Hon. Professor 2004-2009, ISDL, Thiruvananthapuram.

Major Research Projects undertaken

- *Small Scale Dialect Survey Project*

A Research Project sponsored by the UGC and University of Kerala on a 50:50 basis through the University of Kerala for conducting Dialect Survey of Malayalam. Aim: Collection of dialect materials, preparation of descriptive grammars, compilation of dialect dictionaries, drawing of dialect maps, identifying dialect areas with regard to social and regional varieties in respect of Tiya/Ezhava, Nair and Harijan dialects of Malayalam spoken throughout Kerala for a decade since 1965.

Project directed by Prof. V.I. Subramoniam. Assisted by C.J. Roy, P. Somasekharan Nair, R.V.K. Thampuran, B. Gopinathan Nair and A.P. Andrewskutty.

The report of the Dialect Survey of Malayalam, Ezhava/Tiya was published in 1974 by the University of Kerala. About 300 maps each prepared for Ezhava / Tiya and Nair dialects along with frequency charts of variant forms occurring in different districts of Kerala are preserved in the Department of Linguistics, University of Kerala and in the International School of Dravidian Linguistics for reference. All the maps were prepared by two investigators C.J. Roy and B. Gopinathan Nair. The *Dialect maps of Malayalam: Ezhava/Tiya* and the report *Dialect Survey of Malayalam* were published by ISDL in 2006. The *Dialect Maps of Malayalam: Nair* was published by ISDL in 2008.

- *Exploring the Causes for Preservation and Loss of Language in India*

A research project sponsored by the ICSSR, New Delhi through the International School of Dravidian Linguistics, Thiruvananthapuram for 12 months during 1983-'84. Prof. V.I. Subramoniam as Principal Investigator and B. Gopinathan Nair and P. Somasekharan Nair as

co-Principal Investigators. The report was published in IJDL Vol. 26 No. 2 1997, pp. 1-104.

- *Speech Synthesis (Malayalam): An Application for the Blind and Speech Output for Machine Translation*

Project Investigator. Duration - 2 years (April 1999 to March 2001). Funded by the Department of Science and Technology, Government of India.

- *Speech Synthesis (Tamil & Oriya): An Application for the Blind and Speech Output for Machine Translation*

Project Investigator. Duration - $2\frac{1}{2}$ years (July 2002 to December 2004). Funded by the Department of Science and Technology, Government of India.

- *Action Research covering Linguistic Investigation of Language Disorders in Pre-School children (Age 4-6) among Socially Deprived Community and Curriculum Development*

Project Director. Duration - $1\frac{1}{2}$ years (January 2003 to September 2004). Funded by the Department of Women & Child Development, Government of India.

Awards & Honours

- Rockefeller Foundation Fellowship (1955-'57).
- Senior Fellowship in Japan Society for the Promotion of Science (1981) for $3\frac{1}{2}$ months for augmenting Dravidian studies in Japan.
- Sri Rama Subramania Raja Award and a title (1999).
- Award of a title by Vallalar Arakkattalai, Chennai.
- Kalaiñar Virudu Award (2000).
- Tamil Cemmam Award by Madurai Kamaraj University.
- Delivered the Convocation Address of the Kannada University, Hampi, Karnataka (1999).
- Delivered the Convocation Address of the Deccan College Post Graduate Institute, Pune (1999).

Positions Held

- *Founding Member*, International Association of Tamil Research, Chennai.
- *Founding Member*, International School of Dravidian Linguistics, Thiruvananthapuram (1977).
- *Secretary-General*, International Association of Tamil Research (1967-1980).
- *Associate Chief Editor*, Journal of Tamil Studies (till 1970).
- *Secretary*, Drafting Committee of the International School of Tamil Studies, Chennai.
- *Founder-Secretary*, Dravidian Linguistics Association (1971).
- *Founding Editor*, International Journal of Dravidian Linguistics (1972).
- *President*, Place Name Society of India (1974).
- *Dean*, Faculty of Oriental Studies, University of Kerala (1978).
- *General President*, All India Oriental Conference (October, 1986).
- *Honorary Visiting Professor*, International School of Dravidian Linguistics (1981-'86).
- *Vice President*, Dravidian Linguistics Association; Linguistics Society of India; Folklore Society of India.
- *Representative*, AIU, on the Committee on the Documentation Services & Research Information of the ICSSR.
- *Member*, UGC Committee on Gandhian Studies in Indian Universities, Jnanpith Central Committee, New Delhi (till 1992).
- *Associate Membership*, Asiatic Society, Calcutta.
- *Vice-Patron*, Dr. Hermann Gundert World Malayalam Conference.
- Served in various Committees of UGC, JNU and Department of Education, Government of India.
- Chief Editor, *International Journal of Dravidian Linguistics* (1972-1990), Hon. Editor (1991-2009).

Honorary Doctorates

Six Universities have conferred Honorary D.Litt. to Prof. Subramoniam:

Jaffna University, Sri Lanka	1983
Tamil University, Thanjavur	2001
Rabindra Bharati University, Kolkata	2007
Madras University, Chennai	2007
Deccan College, Pune	2007
Dravidian University, Kuppam, Andhra Pradesh	2007

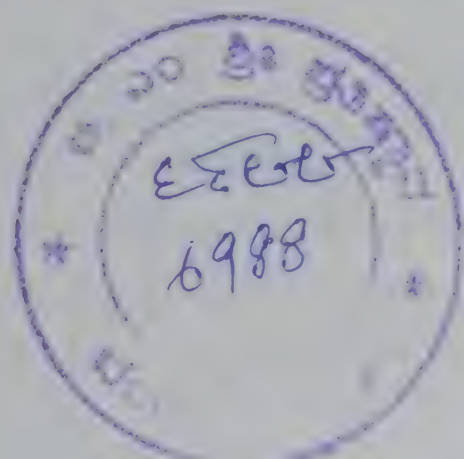
Visits Abroad

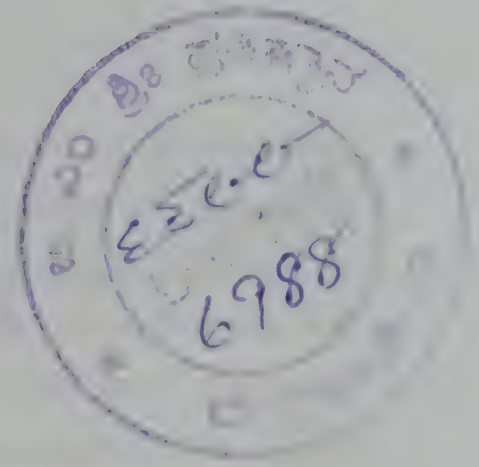
Prof. V.I. Subramoniam visited the following countries in connection with several academic programmes.

USA	1955-1957, 1993, 1998, 2003, 2004
UK	1957, 1975, 1983
Malaysia	1966, 1988
France	1975, 1977
Germany	1976, 1993, 1998
Japan	1981
Sri Lanka	1984
USSR	1990

Publications

He has published 14 books and a number of articles in Tamil, Malayalam and English. His articles, notes, reviews, forward/prefaces/introductions, etc. are found scattered in several journals, periodicals and books. For details see *Bibliography of Prof. V.I. Subramoniam*, pp. 231 - 262 of this issue of IJDL.





THE GENESIS AND GROWTH OF IJDL

B. GOPINATHAN NAIR

The International Journal of Dravidian Linguistics (IJDL) has completed its 39 years of existence. It is expedient to reminisce the genesis and growth of the journal when the 39th Volume, Number 2 *Professor V.I. Subramoniam Memorial Volume* is being released on 17th June 2010 at the inaugural function of the 38th All India Conference of Dravidian Linguists that coincides with the first death anniversary of late Prof. V.I. Subramoniam, the Founder-Architect of DLA Conference and the Founder-Editor of IJDL.

The origin and growth of the journal is closely coupled with the academic life and vision of Prof. V.I. Subramoniam. It embodies the story of agony, strife, aspiration, good faith and vigil of Subramoniam in building up a professional journal from a modest beginning, watching its continuous publication for the past 38 years from January 1972 ever since the first issue appeared till the release of the 38th Volume, Number 1 in the first week of June 2009, three weeks after that he passed away on 29th June. He had promptly gone through the editorial work and proofing of these volumes over the years, besides tacitly finding out ways and means for resolving any financial crisis that had cropped up at times which on the contrary would have marred the punctuality of its release.

History

The first All India Conference of Dravidian Linguists (AICDL) held at Thiruvananthapuram in 1971 under the Presidentship of Prof. Suniti Kumar Chatterji of Calcutta, then National Professor of India in Humanities passed a resolution to publish a professional journal focussing research in Dravidian languages, people, culture, linguistics

and allied subjects. Following this the proposal for publishing the biannual International Journal of Dravidian Linguistics (IJDL) as the organ of the DLA in January and June every year was sent to the then Vice-Chancellor of the Kerala University, Dr. George Jacob, who made available a modest grant of Rs. 5000/- for each issue. The first issue of IJDL with a message of well wishes from Dr. George Jacob, containing about 200 pages was issued in January 1972 with an International Editorial Board and Prof. V.I. Subramoniam as its Founding Editor.

The contents of the issue were very impressive and the contributors were internationally reputed scholars. The opening article of Suniti Kumar Chatterji was an Address to Dravidian Linguists. Other noteworthy articles are those of T. Burrow *The Primitive Dravidian word for Horse*, William Bright *The Enunciative Vowel*, Kenneth L. Pike and Kent Gorden *Preliminary Technology to show emic relations between certain non-transitivity clause structures in Dhangar (Kudux, Nepal)*, J.D. Singh *Panini's theory of Language*, Kamil Zvelebil *A new model of Language*, Ray S. Jackendoff *Speculations on presentences and Determiners*, V.I. Subramoniam *Rules of Nasal Assimilation in Malayalam*, Leigh Lisker *On Stops and gemination in Tamil*:

Similarly M. Andronov, Franklin C. Southworth, H.S. Gill, Chidananda Murthy, Karl H. Manges, Kamil Zvelebil, R.N. Srivastava, Jorgen Rischel and others have made striking contributions to the second issue of IJDL Volume I.

Some scholars, however, apprehended a short span of life for it. Kamil Zvelebil also cautioned about this. IJDL heeded this advice and made earnest efforts for the continuous publication of the Journal in January and June every year promptly.

Nationality of the Contributors

Both Indian and foreign scholars have contributed articles, notes, reviews etc. during the past 39 years. The foreign contributors belong to USA, Sri Lanka, Netherlands, Australia, UK, USSR, Germany, Japan, Czech Republic, Malaysia, Nepal, Pakistan, Singapore, Denmark, Austria, France, Iraq, Senegal, Sweden, Canada, Italy and a few from other countries.

The Indian Scholars are from various Southern and Northern states in India and Union Territories: Kerala, Karnataka, Delhi, Tamil

Nadu, Maharashtra, Andhra Pradesh, Punjab, West Bengal, Uttar Pradesh, Haryana, Himachal Pradesh, Gujarat, Rajasthan, Pondicherry. They represent various Universities, colleges and other academic centres.

Coverage

From January 1972 to January 2010 in 38 volumes and the first number of the 39th volume comprising 77 issues, IJDL has published a total of over 15,000 printed pages of matter covering 622 full-length articles, 260 notes and discussions, 211 book reviews, 39 Presidential addresses of All India Conferences of Dravidian Linguists, 20 reports of conferences/seminars/workshops, 14 miscellaneous items including periodical index of IJDL articles and list of DLA/ISDL publications.

In the earlier volumes, the practice of discussing theoretically important and socially relevant articles and publishing these with comments and replies appeared in the previous issues was undertaken wherein several scholars participated enthusiastically advancing their comments. For instance, *Morphophonemic Alternations* by D.M. Joshi (ijdl.4.2.1975) and comments by C.F. Hockett, D.N.S. Bhat (ijdl. 5.1.1976); *Caste and Language* by D.P. Pattanayak (ijdl.4.1.1975) and comments by K.M. Tiwari, B. Gopinathan Nair, K. Karunakaran (ijdl.4.2.1975), William Bright, P. Somasekharan Nair, E. Annamalai, C.J. Roy, D.M. Joshi, J. Neethivanan, U.P. Upadhyaya (ijdl.5.1.1976) and reply to comments by D.P. Pattanayak (ijdl.5.1.1976).

The lively, meaningful discussions, for instance on caste and language exploring the pros and cons and advancing the for and against arguments enlightened the researchers working at that time on various caste, communal dialects of respective regional languages of South India. The comments, especially of Annamalai and the reply by Pattanayak were intended to urge the numerous dialect investigators to view and study dialects bereft of the generally held stereotyped, static approach to a move far reaching dynamic approach.

Though this practice could not be continued as such because of the delay in getting comments and replies from the respondents and the authors, in another way the critical reviews of articles were entertained. For instance, *On Proto-Dravidian Morphophonemics* by G. Sambasiva Rao (ijdl.2.2.1973, pp. 217-242). This topic attracted scholars and

subsequently discussions and comments appeared also in other journals viz. *Indian Linguistics*: P.S. Subrahmanyam on *Quantitative Variations in Dravidian* (ijdl.36.1.1977, pp. 1-15), G. Sambasiva Rao *Dravidian Alternations* (IL.38.2.1977, pp. 86-94), P.S. Subrahmanyam *Dravidian Alternations: A Critique* (IL.38.4.1977, pp. 227-233). Further comments on these were made by B. Gopinathan Nair *On Quantitative Alternations in Dravidian* (ijdl.8.1.1979, pp. 32-41) and discussions by both Gopinathan and Rao (Ibid., pp. 42-45). The discussions and citations appeared in other publications. See McAlpin's *Proto-Elamo-Dravidian*.

Old and rare articles were reprinted with adequate acknowledgements to the source.

Languages Analysed

Regarding the contents of IJDL, the thrust of the journal was to give first preference to Dravidian languages both written and spoken, viz. Tamil, Malayalam, Kannada, Tulu, Telugu including Tribal Dravidian languages and dialects. Besides, articles on other language families were also accommodated.

Among the Tribal languages of India, articles in the following were entertained. Irula, Jenu Kurumba, Alu Kurumba, Cholanaikan, Muduga, Paniya, Adiya, Malto, Kurux, Brahui, Gondi, Kubi, Dhangar, Tibeto-Burman, Mahto, Kinnauri, Remo, Kharia, Khasi, Bhili, Gojri and Andamanese.

Articles on Indo-Aryan languages include Sanskrit, Vedic Sanskrit, Prakrit, Hindi, Urdu, Sindhi, Sourashtri, Kashmiri, Konkani, Marathi, Bengali, Hindustani, Oriya, Pahari, Punjabi, etc.

Articles on Foreign languages include English, Chinese, Sinhalese, Lithuanian, Portuguese, Bangala, Arabic, Japanese, Russian, Magyar, French.

Articles on distant genetic relationship between Dravidian, Indo-Aryan and other language families were accommodated. For instance, Dravidian - Indo-European, Dravidian - Negro-African, Indo-Aryan - Tibeto-Burman, Elamite - Dravidian, Dravidian - Sinhalese, Dravidian - Munda.

Important Topics Discussed in IJDL

A cursory glance at the bibliographical index to IJDL volumes hitherto published would reveal the breadth and width of the subject matter of linguistics and related disciplines discussed therein besides the languages and language families dealt with. A detailed analysis and synthesis of the articles would throw light on the theoretical and applicational aspects as well as an overall picture of the thrust areas projected in IJDL. Due to paucity of space, such an attempt is not attempted here except listing the gist of the titles of salient articles.

Tamil: Relevance of the terms *mey*, *orru* and *pulli* to the system of Tamil morphophonemics, oral vowels of colloquial Tamil, stops and gemination, *ai* and *au*, palatal Nasal, *alapetai* forms, words denoting colours in *Cilappatikāram*, Adjectives in Modern Tamil, Manner Adverbs, Verbals, Nominals, Effectivity and causativity, Verbal Extension in Tamil, Homogeneity and integrity of *Tolkāppiyam* and *Paṇinīya śkiṣa*, Dynamics of Kamban's language, Locative terms in Tamil, Vowel shift, diglossia in Tamil, Tamil Anaphor *tān*, Fiji Tamil, Treatment of quantifiers in *Tolkāppiyam*, Intonation patterns in Tamil, Diglossia in Tamil, Tamil Verb Stem formation, origin of the word *tamil*, *Tamil* in Fiji, Phonological system of Tamil expressives, *Tolkāppiyam* and *Aindra* grammar, German Tamilology, strategies in the formation of Compound verbs in Tamil, Literary criticism in Tamil and Sanskrit, Cognitive organization of Tamil simple sentences, Pampa's connective marker *-am* and accusative plosive in Tamil, Adjectival complements in Tamil, Perfect form in Tamil, A linguistic interpretation of *kaṭi* jokes in Tamil, Tolkappiyar's concept of Linguistics of literary languages, colloquial Tamil. Five Portuguese Tamil Grammar manuscripts, verb bases as non-past adjectives in old Tamil and old Telugu, Morpheme and Phrase boundaries in Tamil and Language attitude of dispersed Tamils, etc. are discussed.

Malayalam: Enunciative vowel, two Malayalam phonemes *ṇ* and *n*, Nasal assimilation, Phonological systems, present tense markers, Modern Malayalam tense forms, phonological formulae for verbal suffixes, Aspectual systems, Pronouns and relative clause in Laccadive Malayalam, Two Malayalam inscriptions from Coorg, Malayalam Grammar by Carmelites, Degrees of politeness in Malayalam, Early use of the word Malayalam, Negative finite verb in Malayalam, Classification

of Malayalam verbs in the Malayalam Lexicon, Auxiliary verbs in Malayalam, Dietic properties of person in Malayalee ESL learners, Ellipsis in Malayalam, Personal Pronouns and pronominal forms in Malayalam, contribution of *Līlātilakam* to Language study, Malayalam sentential negation, concept of language development in *Kēraḷapāṇinīyam*, Reflexives and pronouns in Malayalam, Malayalam Speech Synthesis: Application for the blind and speech output of machine translation, A note on Gundert, The development of pre- Malayalam **ai*, citations in *Rāmacaritam* in Gundert's dictionary and Dialect Survey of Malayalam in retrospect, etc. have been dealt with.

Kannada: Palatalizing and velarizing dialect, Nasalization, Compound verb construction, Kannada Syntax, Pala-Vela dialect of Kannada, Compound formation, Agent suppression in Kannada and Tulu, Lexical opposites in Kannada, Bilingualism in a Karnataka border village, Morphology of Colloquial Kannada verbs, Syntactic deficits in Kannada-speaking aphasics, Conversational Kannada, Voicing and degemination of original stops in Kannada, Standard Kannada and dialect of Dharwad, etc. are the most important articles that have been published.

Telugu: Intonation of Colloquial Telugu, Secondary verb in Telugu, Vowel harmony, Status of aspirated sounds and their synchronic and diachronic changes, Nominal inflexion in Sri Lanka, Gipsy Telugu, Names and address terms, Tense shift in Salem Telugu due to contact with Tamil, Development of Telugu lexicography, English loanwords in Telugu, N+N compounds in Telugu, Verb *be* in Ganjam Telugu, A socio-linguistic survey of Telugu Speech, Phonological errors in Telugu, Phonetic, Phonological problems in Telugu learning, Processing of Telugu compounds, Telugu proverbs, etc. have found a place in IJDL.

Tulu: Negation in Tulu, Auxiliary verbs in Bunt's Tulu, Nominative, Agent Suppression in Kannada and Tulu, Sociolinguistics and Tulu dialect survey, Folk culture reflected in Tulu place names, Linguistic studies on Tulu grammar, etc. have been dealt with.

Dravidian Tribal Languages and Dialects

Aspects in Kurux, Gondi, PDr **O* in Malto, Brahui, Demonstratives in Kui, Kuvi, Kūbi, Echo word formation in Ālu Kurumba, Tenseless verb in Jenu Kurumba, Irula place names,

Language of Cholanaikan, Muduga, Personal Pronouns in Paniya, Adiya, Brahui and Balochi morphological similarities, The glottal stop in Kui, Gutob Gadaba: A socio-linguistic appraisal, Rethinking Tribal future in India, Indi/Awe: a Tribal Dravidian language, Toda texts, Linguistic heritage of South Indian Tribes, Brahui nomads: cultural values, the Tribal and Minor Dravidian languages, Brahui as medium of education in Balochistan, Mullukurumba, Endangered Tribal languages of Central India, Language and schooling of indigenous children, etc. are some of the topics covered.

Comparative Dravidian: Enunciative vowel, Evolution of dental nasal, PDr. Morphophonemics, Quantitative alternations in Dravidian, Numerals, Pronominal Suffixes, Verbals, Gender number in Dravidian, PDr. word for horse, sub-groups in Dravidian, interrelation between Tulu and Dravidian, close relationship among Dravidian, About proto Dravidian **guti* vs. **kuru*, Proto Dravidian terms for cattle, An assessment of Caldwell, Noun morphology studies since Caldwell, Genetic comparison: Family tree in Dravidian since Caldwell, Dialect Studies since Caldwell, Proto Dravidian agricultural terms, Dravidian and Dravidian languages spoken in India, Comparative Dravidian: Current perspectives, Nilgiri's Areal studies, Initial *v-/b-* change in Dravidian, Comparative Dravidian Linguistics, *c/s > t* in Dravidian, On the reflexes of PDr **c-*, Prehistoric implications of Dravidian Elements in the NIA Lexicon with special reference to Marathi, The Indus Valley writing is evidence of ancient Dravidian literacy, Some Dravidian compounds, Toda studies, On Dravidian prehistory, Dravidian Personal Pronouns, The Dravidian zero negative, Original Dravidian homeland of the Brahuīs, etc. are the most important articles that have been published.

Distant Genetic relationship among Dravidian and Other language families

Dravidian and Indo-European, Dative case in Indo-Aryan and Dravidian, Tamil and Japanese, Comparative study of Tamil and Japanese vowels, Influence of Dravidian phonology in Sinhalese, Greek and Dravidian, Indo-European and Dravidian words, Dravidian and Negro-Africa, Dravidian and Munda, Linguistic continuity and African and Dravidian languages, Uralic and Dravidian, Dravidian substratum for Magadhan languages, Dravidian and Tibeto-Burman: a typological study, Dravidian and Mongolian cognates, Substrate Languages in Old

Indo-Aryan, 1000 Duraljan Etyma, Dravidian influence on Munda, New Dravidian etymologies for Sanskrit words, Sumerian and Proto-Duraljan, African roots of the Dravidian speaking tribes, Dravidian and Altaic, A word for horse in Chinese and Dravidian, Similarities in Sindhi and Dravidian languages, Dravidian substratum and Indo-Aryan languages, A statistical approach for pattern search in Indus writing, Segmentation of Indus texts, Dravidian and Altaic: water - viscosity - cold, etc. have been dealt with.

General and Theoretical

A number of articles pertaining to general and theoretical aspects of linguistics have appeared in IJDL. For instance, Caste and language, Socio-linguistic stratification and speech variation, Linguistic convergence, Sub-grouping, Defining standard language, Process of standardization, Structural anthropology, Generative semantic methods, Systemic phonology, Folkloristics, analysis of narratives, Lexical insertion, concept formation and language equivalences, Autonomy in language, philosophical musing of ancient linguists, Dialect studies, Forms and Functions of Applied linguistics, Computer and Translation, Nature of grammatical competence, Language Deprivation among socially disadvantaged in Bihar, Language planning and terminology, Coining of Technical terminology, Exploring the causes for the preservation or loss of languages in India, Explorations in Indian Sociolinguistics, Written and Spoken language: Contrasts and relationships, Geolinguistics, Standardization of Indian languages, Metaphors in Grammar, Force Dynamics, Case structures and prototypicality, Anatomy of three language formula, Diglossic or the Dynamics of intersubjectivity, History of linguistics of Indian languages, Learners bilingual Dictionary: A format for Indian languages, On the teaching of Dravidian languages, Towards an explanation paradigm in phonology, system reduction and system re-analysis in Dravidian, Aspects of Sociology of Grammar of Early Middle Tamil period, Linguistics and post-modernism, Stimulus response as a source of Grammaticality of Human mind, A remedial treatment to Errors, Retroflex sounds in Indian Languages, Corpus generation and Text processing, The Emerging South, Sociolinguistics of translation, Colonial linguistics and the spoken language, Borrowing, Code mixing and Code switching, Requests, apologies and politeness, Vowel Consonant sounds of Indian languages, Restructuring grammars in

contact situations, Preliminaries to study of impersonal Finite Systems, Relevance of corpus language research and application, Model of an ideal production dictionary, Chomsky's minimalist language conception, Functor deletion, Linguistic theory, Sources of impersonal finite systems in Dravidian, Influence of socio-psychological factors on second language learning, The changeable image of Language Discourse, Fact and the Causality principle, The role of grammar in communicative language teaching, History and geography of Human genes, Pronouns, Grammar and Speech in the Brain, Translation and Hermeneutics, Genes, mind and culture, Language education and communication, Dravidian diaspora, Neural representation in reading, Fortunatov's law and Dravidian, Modularity and functional connectivity in the Brain: Proposals for language disorders, Language sampling in Kannada: clinical challenges and potential, Interdependence of morphology and syntax in sentence transformations, On the indeterminacy of contexts and Interface between Historical and Sociolinguistics.

Sanskrit: Verbal stems and syntactic structures in Sanskrit, Grammatical methods in *Aṣṭādhyāyī* and *Tolkāppiyam*, Linguistic speculations of Sanskrit rhetoricians, Bharthruhari's views on definition of sentences, treatment of *kāraka* by Pāṇini, Sanskrit influence on Tamil grammar, Burrow's contribution to Sanskrit studies, Ṛgvedic loanwords, Pāṇini's theory of language and *kāraḥ*, Technical terms in Pāṇini, Phonological changes in Pāṇini: his theoretical assumptions, Austric influence in Brahmana and Rishi traditions, Studies in Sanskrit Syntax, Recent research in Pāṇinian studies, *Vyakaraṇ* and its significance, Two Pāṇini Scholars differ: Cardona and Singh, A history of Sanskrit Literature, Katantra/non-Pāṇinīyan grammars vis-à-vis Bengal, Apropos of Mugdhabodha system of grammar, Prakriyasarvasvam, Nature of Speech Varieties described by Pāṇini in the *Aṣṭādhyāyī*, Valmiki's Sanskrit, Sanskrit and Dravidian - A case of prosodical convergence, *Śikṣā*s and Source book on Indian phonetics, Sanskrit - India's cultural language etc. have found a place in IJDL.

Hindi, Urdu, Bengali, Punjabi, Gujarathi, Konkani, Kashmiri, Hindustani, Oriya, Saurashtri, Sinhalese, Assamese, Sindhi, Manipuri

Consonant assimilation in Hindi, Causative rule in Hindi, Intensifiers, Reflexivization in Hindi, Pidginization in Hindi-Urdu,

Conjunctive participle in Hindi-Urdu, Bengali verb, Reflexivization in Bengali, Bengali Syntax, Linguistic Atlas of Punjabi, Purposive predicates in Gujarathi, Palatalization in Konkani, Konkani - A case for language planning, Model verb of Obligation in Kashmiri, Compound verbs in Kashmiri, Englishization in Oriya, Dravidian influence in Saurashtri secondary verb, Verb in Sinhala, Convergence and diglossia in Sinhalese pronoun, Post position in Oriya, Bengali verb - An aspectual approach, Archaeology of Bangla grammar, Linguistic economy at work in Oriya, Bengali compound verbs, Error patterns in Bangla texts, Bengali dialects, genesis of Oriya dative case, Verb duplication in Assamiya, Echo formation in Assamiya, Contrastive analysis of gender in Hindi, A contrastive and comparative study of Standard Urdu and Standard Hindi, Oriya language movement and Oriya linguistics, Distribution of Bengali vowels, Zero in Bengali orthography, Glimpses of Sindhi language, Onomatopoeia in Bengali compared to Oriya and Hindi, The word for fire in Oriya, Observation of Oriya as a typologically disturbed language, Language modernization in Oriya newspapers, Reduplication in Assamese, Relativization in Dhakkini, Study of Bangla consonant clusters, Bengali culture and society through its riddles, Lexical motivation for periphrastic construction in Bangla, Evolution of Bengali grammar, Sociolinguistic study of Oriya personal nouns, Nominalization in Manipuri, Multiword expressions in Bangla, Food talk in Oriya, Hindi: An essential grammar are some of the topics discussed.

Foreign languages: Creole Portuguese phonology, English in Indian situation, Error analysis in English, Consonants in West-Greenlandic, Lithuanian Baltic *e* or *a* in preterite, Description of sun and moon in Arabic, Ancient Chinese retroflex endings, English language teaching in India, Austric in India, Explorations in the functions of Indian English, Indian Pidgin English, Nuances of English in India, Butler English: form and function, etc. were accommodated.

Financial Support

For four years from 1972 to 1975 the annual financial assistance of Rs. 10,000/- for running the journal was met by the University of Kerala through the Department of Linguistics where the office of the DLA and IJDL were temporarily housed. The receipt of annual subscription of about Rs. 6,000/- was remitted to the University. After

noting the Audit enquiries envisaging the financial stringencies and consequent delay that would arise in publishing the journal, we approached the ICSSR, New Delhi which after examining the standard of the journal and the need for its continuous publication took initiative to set up an Endowment of Rs. one lakh by contributing Rs. 25,000/- from its fund, Rs. 50,000/- from Ford Foundation routed through ICSSR and Rs. 25,000/- as share of DLA. Consequently the DLA acquired the assets and liabilities of the Journal with the permission of the Kerala University. J.P. Naik, the then Secretary of ICSSR is solely responsible for creating this endowment, which led to the regularity of publication of the journal.

Endowment Committee

To oversee the endowment and to ensure the regularity of publication of IJDL, a three-member Committee with K.N. Raj (1975-1986), Hans Raj (1986-1996) nominated by the ICSSR, New Delhi as its representative, R.C. Hiremath (1975-1986), G.K. Panikkar (1986 onwards) by the DLA as another member and the Chief Editor of IJDL as Ex-officio Member Secretary was constituted. V.I. Subramoniam (1975-1996 & 2002-2009), A.P. Andrews Kutty (1996-2001) and B. Gopinathan Nair (2002 onwards) as Chief Editor of IJDL functioned as Member Secretary.

Editorial Board

The Editorial Board of IJDL comprises an international galaxy of reputed scholars. The first Editorial Board includes S.M. Katre (Pune), T.P. Meenakshisundaram (Coimbatore), P.B. Pandit (Delhi), H. Berger (Heidelberg), R.C. Hiremath (Dharwar), Leigh Lisker (Pennsylvania), K. Mahadeva Sastri (Anantpur), Bh. Krishnamurti (Hyderabad), J.R. Francisco (Philippines), T. Kandiah (Ceylon), John Marr (London) and Semyon Rudin (Leningrad). In 1974 M.S. Andronov (Moscow) and in 1976 R.N. Srivastava (New Delhi) were nominated in place of Semyon Rudin and P.B. Pandit respectively.

The Editorial Board was reconstituted in 1981 with new members, viz. Sebastian Shaumyan (USA), H.S. Ananthanarayana (Osmania, Hyderabad), F. Gross (France), K.V. Subba Rao (Delhi), D.N.S. Bhat (Thiruvananthapuram) and Jaroslav Vacek (Czech Republic). This Board continued for ten years.

In June 1991, the Editorial Board was again reconstituted with James W. Gair (USA), John F. Marr (UK), A. Govindankutty Menon (Netherlands), N. Gurov (USSR), M. Israel (Madurai), G. Sambasiva Rao (New Delhi), B.P. Mahapatra (Calcutta), K. Rangan (Tanjore) and E. Annamalai (Mysore). In 1994, K. Kapp (Germany) was also included in the Editorial Board. In 1996 the Board was reconstituted with André Sjoberg (USA), Francis Ekka (Mysore), J. Neethivanan (Tamil Nadu), William Madtha (Dharwad) and K. Loganathan Mutharayan (Malaysia). In 1998 Sitraleka Maunaguru (Sri Lanka) was also included in the Editorial Board.

The Editor's Desk

The Chief Editor V.I. Subramoniam (1972-1990) was assisted by the Deputy Editors V.R. Prabodhachandran Nayar (1972-'73), Elias Valentine (1973-'88), P. Ramachandran Pillai (1974-'80), P. Somasekharan Nair (1974-'80), S. Velayudhan (1981-'88), V. Prakasam (1981-'91), E. James R. Daniel (1981-'96), B. Anvita Abbi (1991, 1994-'96), B. Sreedevi, Annie Monsy (1991-'96), B.N. Pattanayak, Panchanan Mohanty, Scaria Zacharia (from 1996), Joint Editors V. Syamala (from 1999) and E. James R. Daniel (from 2002). A.P. Andrews Kutty, Deputy Editor (1978-'80) became Associate Editor (1981-'86), Associate Chief Editor in 1987 and Chief Editor in 1991. V.I. Subramoniam became the Hon. Editor in 1991. B. Gopinathan Nair took charge as Chief Editor in 2002; Andrews Kutty became Consultant (2002-2004) and V.I. Subramoniam continued as Hon. Editor till 2009. The Editor's desk looked after all matters relating to subscriptions, annual bookings, payment, sales, manuscripts, articles and books for review.

Citations of IJDL in Other Works

Several articles appeared in IJDL have been cited by other journals and books on Dravidian and Indian linguistics and some reprinted with permission. For instance, see *Sociology of Language*, Vol. XVI, Mouton, The Netherlands; *Indian Linguistics*, Pune; *Language*, USA; *Studies in Linguistics Sciences*, Vol. VIII No. 1; *Journal of American Oriental Society* in the series on Syntax and Semantics had briefed two articles. The articles of William Bright, Colin Masica and M.B. Emeneau were reprinted as books. On demand from scholars and as a policy of bringing together articles dealing with specific themes

found scattered in IJDL volumes into one place to know the current perspectives and for easy access to researchers, such collections of articles into book forms have been undertaken, viz. (1) *Contact and Convergence in South East Asian Languages*, (2) *Pioneers in Linguistics Series I*, (3) *Sri Lanka Creole Portuguese Phonology*, (4) *Effectivity and Causativity in Tamil*, (5) *Language and Brain*, (6) *Dynamics of Verbal Extension in Tamil*, (7) *Collected Papers on Malayalam Language and Linguistics*.

The *Linguistic Abstracts*, a quarterly journal published by Blackwell Publishing, Oxford and USA in its several volumes have regularly abstracted articles that were published in IJDL: The *Linguistic Abstracts* Journal Vol. 24 No. 2 December 2008 has abstracted all the nine articles published in IJDL Vol. 37 No. 1 January 2008.

Press which Prints

From 1972 to 1988, IJDL was printed at the Kerala University Central Co-operative Press at Trivandrum which identified with the production of the journal. The press had its limitations, the compositors were not trained in linguistics; pagesetting without mistakes was a laborious task, so also was proofing to the Editor.

Computerized typesetting however was adopted from June 1991. It was done in the ISDL Computer Unit. The proofing was considerably well done and printed at Dawn Offset Printers, Thiruvananthapuram. The production of the journal was subsequently found as keeping a reasonably high standard which was appreciated by the readers of the journal.

Decennial Celebrations in 1982

The Decennial celebration of IJDL was conducted at the Gujarathi Samaj Bhavan at Delhi along with the 10th Annual Conference of Dravidian Linguists sponsored by the Department of Linguistics of the Delhi University. The conference was inaugurated by the then Minister for External Affairs, Dr. P.V. Narasimha Rao, a reputed scholar, under the Chairmanship of Hon. Thiru Lakshmanan, Deputy Speaker of the Lok Sabha. Dr. Rao in a stimulating speech praised the academic activities of the DLA, ISDL and the journal. Dr. B. Ramachandra Rao, then Vice-Chairman of the University Grants Commission felicitated the delegates. Prof. Sebastian Shaumyan of Yale

University delivered a splendid decennial address on *Semiotic Bases of Universal Grammar* which was received well by all the delegates of the conference. Dr. Karan Singh presided over the meeting and concluded that despite the foreign exchange difficulties experienced by the Government of India at that time, Professor Shaumyan's airfare and a grant of Rs. 10,000/- for the Lecture were met by the DLA. Dr. K.V. Subba Rao, then Professor of Linguistics, Delhi University made all arrangements for the conference.

Silver Jubilee Celebrations

The Silver Jubilee celebrations of the IJDL was held at Kuppam, Andhra Pradesh on 20th June 1996. Dr. William Bright delivered the Silver Jubilee address. He recalled his association with IJDL and the contribution of the journal to Dravidian studies in particular and South Asian linguistics in general and stated that it was an honour for him to congratulate the journal.

IJDL and Sister Institutions

The DLA, the parent organization of IJDL is projecting the publication and spread of the journal by enrolling life, annual and institutional members and contributing 75% of membership fee for the growth of the journal. The life members of DLA receive a free copy of the journal.

Presently life-membership fee is Rs. 2,000/- in India. For countries other than India it is US\$ 400/-. Annual membership is Rs. 600/- or US\$ 90/- and Institutional membership is Rs. 20,000/- or US\$ 1,000/-.

The ISDL, another sister organization provides the academic support for the growth of the journal. The good library and the researchers in ISDL help in the evaluation of articles and help to check the references and other bibliographical information.

The *DLA News*, a monthly publication of 6 pages reports the activities of DLA, ISDL, IJDL and other institutions in India and abroad. A copy each of the newsletter is sent to all life and annual

members free of cost. It can also be obtained in the website www.ijdl.org.

Future Expansion

The expenditure for publication and establishment of IJDL is born mainly from the interest on Endowments instituted for the purpose, amount received towards subscription, sale proceeds of back volumes of the journal and the moderate rent received from IJDL building. The journal has a building of its own in the Thiruvananthapuram city adjacent to the DLA building. Except for one room where the office of the IJDL is functioning, the rest of the building is rented out which fetches some income. It has also an annex in the V.I. Subramoniam Memorial ISDL Complex. The sales of back volumes have to be promoted so that some more income can be generated.

We are glad to note the critical comments of several scholars and readers of IJDL who have specifically stressed the punctuality in publication, standard of articles and proofing as good besides the availability of working data on less known Dravidian languages and other language families.

We would like to make a slight increase in the number of pages per issue so as to cater to the needs and to promote substantial contributions of talented youngsters, especially to strengthen the review section with critical comments on contemporary research in linguistics and allied subjects which appear in the form of books, monographs and standard articles, etc. both in India and abroad.

The Editorial Desk of the IJDL thanks all the Life Members of the DLA, contributors and readers of IJDL for their co-operation and would like to urge them to express their views freely to achieve further progress in the quality and standard of the journal.

IJDL serves as a clearing house for Dravidian researchers to publish their works. It will continue to serve as a window for all linguistic theories and for publishing contributions from all nations without prejudice. The IJDL has now become an institution by itself and is before the scholarly world for its further academic growth and future development.

BIBLIOGRAPHY

B.A. Sharada & Vani, V. "Current Research in Dravidian Linguistics". *IJDL* Vol. 15 No. 1 1987. pp. 133-143.

B.A. Sharada. "Research in Dravidian Linguistics: A Quantitative Analysis". *IJDL* Vol. 18 No. 1 1989. pp. 111-123.

V.I. Subramoniam. 2001. *Silver Jubilee Review: International School of Dravidian Linguistics. Its 25 Years of Existence*. ISDL.

----. 1996. *Silver Jubilee Review: International Journal of Dravidian Linguistics*.

---- (Ed.). *IJDL* Volumes No. 1 1972 to No. 38 No. 2 2009.

A. Thasarathan. Index of Articles. *IJDL* Vols. I to VIII; *IJDL* Vol. IX No. 2 1980. pp. i-xxxiii.

K. Balachandran. *Index to the International Journal of Dravidian Linguistics Vol. 1, 1972 to Vol. 20, 1991*. pp. 92-145.

R.B. Bindu. *Index to the IJDL Vol. 27 No. 2, 1998 to Vol. 32, No. 2, 2003, IJDL Vol. 33, No. 1, 2004*. pp. 229-239.

----. *Index to the IJDL Vol. 33, No. 2, 2004 to Vol. 37, No. 2, 2008, IJDL Vol. 38, No. 1, 2009*. pp. 219-239.

LANGUAGE TYPOLOGY AND REGULAR SOUND CHANGE

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Abstract

*Sound changes originate in the varying speech habits of speakers of a given language or a language family, owing to several factors. I propose that there are two kinds of change: (1) Those that are typologically triggered or motivated, and (2) those that do not carry this additional typological motivation. The shared features of (1) in a given family are: (a) such sound changes are actuated and implemented in different languages and subgroups independently giving the impression that they have resulted from shared innovations, (b) they have different time profiles for different members or subgroups of the same family, (c) they are more regular than (2) and could even be exceptionless. The proposal is mainly based on the examination of comparative data from the Dravidian family, e.g. the merger of highly marked segments like Proto-Dravidian *z and *t̪ with unmarked ones, the elimination of segments that have defective distribution like word initial *y, *ñ, etc. Supporting evidence from other language families has been provided. What is proposed is that certain sound changes, which are supported by system-internal pressures, tend to be highly regular compared to those, which lack such typological backing.*

1. The hypothesis

1. Most of the historically identifiable shared innovations have exceptions. The typologically motivated ones or those, which have a

typological goal, are extremely regular (see changes (i) to (m) for Dravidian discussed below).

2. It is likely that shared innovations generally spread through lexical diffusion (Lass 1997: 139-42)¹. Typologically triggered sound changes spread without exception but are spatially gradual.

3. There are other language families, besides Dravidian, which lend support to the above hypothesis. First, evidence from Dravidian.

2. Dravidian evidence

2.1. **Introduction.** The Dravidian languages (spoken by 220 million speakers) constitute the fifth largest family in the world. It has four genetically related subgroups (see Map 1 and Figure 1 in Appendix):

SOUTH DRAVIDIAN I (Abbreviations are indicated in parentheses)

1. (Ta)mil, 2. (Ma)layālam, 3. (To)da, 4. (Ko)ta, 5. Irul̥a, 6. Kurumba, 7. (Koḍ)agu, 8. Baḍaga, 9. (Ka)nnada, 10. (Tu)l̥u;

SOUTH DRAVIDIAN II

11. (Te)lugu, 12. (Go)ndi, 13. Koṇḍa, 14. Kui, 15. Kuvi, 16. (Pe)ngo, 17. (Man)ḍa;

CENTRAL DRAVIDIAN

18. (Kol)ami, 19a. Naik̥ri (Nk), 19b. Naiki (Nk)((Ch)anda), 20. (Pa)rji, 21. (Oll)ari, 22. (Gad)aba;

NORTH DRAVIDIAN

23. (Kurux), 24. (Mal)to, 25. (Br)ahui.

SD I and SD II had a common stage and constitute a larger subgroup.

1. See particularly fn 41 on p. 141: it is most likely that all phonological change starts with lexical diffusion and most ends up given enough time Neogrammarian.

2.2. Proto-Dravidian phonemes

(A) Vowels: / i e a o u /

High	i ī	u ū
Mid	e ē	o ō
Low	a ā	

(B) Consonants:

Stop	p	t	ṭ	ṭ̣	c	k	
Nasal	m	n		ṇ	ṇ̣		
Lateral			l	ḷ			
Flap			r				
Approximant				ɻ			
Semi-vowel	w				y		H

Apicals (alveolar and retroflexes) did not occur word-initially; / p t c k m n/ occurred before all vowels; ṇ occurred before /a ~ e ā ~ ē i ī/, y before /a ~ e ā ~ ē/, and w before unrounded vowels. The stops had lenis allophones intervocalically [w d ḍ ṛ d s g]; after a nasal, they were voiced. Word-initially and in gemination stops were always voiceless. Except for Old Tamil and Malayālam and, to some extent, Toda, the descendant languages have also developed word-initial voicing and aspiration through sound changes and borrowing from Indo-Aryan. The highly marked segments /ṭ ɻ/, word initial /ṇ y/ have been lost in most of the languages through splits and mergers.

2.3. A general profile of major sound changes in Dravidian

(i) Sound changes without a typological goal

CONSONANTS

(a) Palatalization of velars before front vowels /i ī e ē/ (Tamil-Malayālam shared the innovation. The Telugu sound change is independent of these.)

- (b) $*c > s > h > \emptyset$ in SD I around 3rd century BC; many exception, the sound change ceased to operate after it covered about 12% of the eligible lexicon (SD I + Telugu); the sound change is ongoing in SD II languages: Gondi, Kui, Kuvi, Pengo, Manda.
- (c) $*k > x, q / ___ [+ V, -high]$ (ND)
- (d) $*c > k / ___ [+ V, + high]$ (ND)
- (e) $(C_1) V_1 C_2 - V_2 > (i) (C_1) \nabla_i - (C_2 = /y w k/; \text{syllable contraction: PD}), (ii) (C_1) C_2 \nabla_1 -- (C_2 = \text{Apical consonant; apical consonants shifted to word-initial position, or form clusters with } C_1 \text{ in SD II languages through metathesis and vowel contraction. For a detailed treatment see Krishnamurti 1978}).$
- (f) $[n, m] > [d, b] / \# ___ [+ V, -back]$ (pre-Brahui; see Krishnamurti 1969)

VOWELS

- (g) $[i, u] > [e, o] / \# (C) ___ + a \dots$ (PSD = Proto-SD I & SD II; see Krishnamurti 1958)

Many changes leading to vocalic umlaut in Toda, Kodagu and Kota are not included here, since they are not relevant to our discussion.

- (h) $[\bar{e}, \bar{o}] > [\bar{a}] / (C) ___$ (pre-Kui-Kuvi).

Here the long mid-vowels result as the output of Rule (ei); see Krishnamurti 1980.

(ii) Sound changes, which presumably have a typological goal

A number of sound changes have occurred or are occurring in contiguous languages at different times, producing a final result, which, if we looked back after many years, would give the impression that they were shared innovations. These are different from the sound changes discussed so far in two respects: (1) they do not have a fixed, definable time frame, except that they are all post-PD; (2) there is evidence that they have been occurring in different languages at different times; some are on-going; (3) they cut across the subgroups set up on the basis of

shared innovations; (4) it seems possible that their spread can be defined in terms of broad geographical regions (see Krishnamurti 1998).

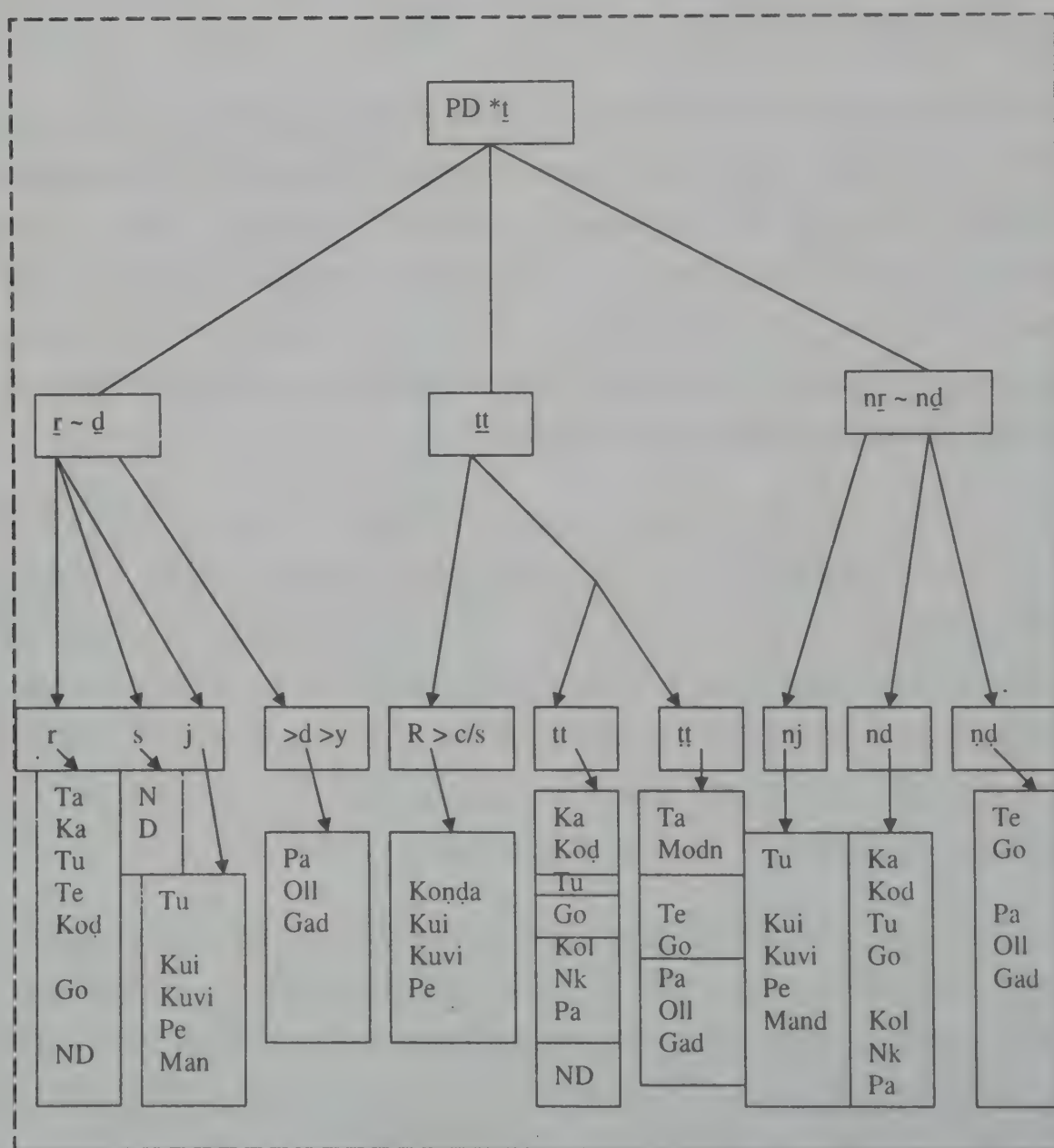
- (i) PD root final *-ay*, develops to *e/ē* and *i/ī* (monophthongization) in almost all SD II, CD and ND languages.
- (j) PD **y-* is lost in all languages except Old Tamil; Mdn. Tamil and Malayālam also do not have it. The vowel following **y-* was **A* (an archiphoneme, short as well as long), which is represented as *e/ā* in SD I, as *ē/ā* in SD II, as *a/ā* in CD and as *e/ē* in ND. Similarly PD **ñ-* merged with *n* in all languages except in Malayālam which retains some items with **ñ*, but not all.
- (k) PD **z* is lost in all languages, consequent on splits and mergers during historic times, except in Standard Tamil and Malayālam. It merges in different languages with *ḍ ṛ ḷ ḻ r y š s Ø*. No clear isoglosses seem possible.
- (l) PD **ṇ*ḷ* became deretroflexed as dental/alveolar *n l* in SD II, CD and ND. They are internally reconstructable in certain languages of SD and CD. All SD languages preserve them. The change, however, is a sweeping one. Note that the retroflex stop **ḷ [-ḍ-]* has remained stable in all languages. These contrastive developments lead us to believe that, in Dravidian, the retroflex stops are unmarked but sonorants are marked.
- (m) PD */*ṭ *tṭ *nṭ/ [ḍṛ tṭ nd]* are preserved only in Toda-Kota in SD I and to some extent */tṭ/* in Modern Malayālam in SD I, and in Koṇḍa of SD II as */ṛ R nṛ/*. In the rest of the languages *[ṛ]* merged with the flap */r/* and *[tṭ nd]* with dental */tṭ nd/* or retroflex */ṭṭ̣ ṇḍ̣/* in all languages. Some of these changes are datable within the literary languages; no common historical stage can be postulated (see Figure 2).
- (n) Two syllable types have become normalized in all languages, except in Tamil and Malayālam, viz. (C) VCCV or (C)VCV. A number of phonological changes have occurred leading to this typological goal. Such a shift is also evidenced in Indo-Aryan (Krishnamurti 1991). PP > P, NP > B/#(C)VCV is part of this strategy.
- (o) Loss of a high vowel */i u/* in the medial (unaccented) syllable has led to the creation of disyllabic forms from underlying trisyllabic

ones, e.g. **mar-untu* 'medicine': Te. *mandu*, Ka. *maddu*, *mardu*, Pa. *merd-* (< **mar-nt-*). Consequent on changes in canonical shapes, obstruent voicing became phonemic in almost all the languages except in Tamil, Malayālam, and Toda, as follows:

(p) PD	<i>*P-</i>	<i>*-P-</i>	<i>*-PP-</i>	<i>*-NP-</i>	<i>*-NPP-</i>
post-PD	?	-B-	-P-	-NB-	-NP-

The initial position is filled by secondary voicing and through borrowings from Indo-Aryan. The older single vs. double contrast became voiced vs. voiceless.

Figure 2
Splits and mergers of PD **t*



3. Areal typology

The elimination of the alveolar in all its occurrences has led to the emergence of a five-point stop system in most of the Dravidian languages, which has then produced a common Indo-Aryan Dravidian type in phonology with borrowed aspirated stops in Dravidian in all the five articulatory positions. The markedness and, therefore, instability of **t* in a six point stop system was further assisted by factors of areal typology. This goal necessitated the elimination of the alveolar stop. Similarly, the emergence of (C) ∇ C/(C) VCCV in Indo-Aryan and Dravidian has resulted from the elimination of super heavy syllables like ∇ CC in both the families. The retroflex stop has remained stable in both the families and not the retroflex sonorants, which merged with unmarked dental/alveolar in most subgroups.

4. Evidence from other language families

(i) Proto-Oceanic had word-final consonants as well as vowels, while some of the derived families and languages have become totally vowel ending in two ways: (a) either the final consonants are lost, or (b) an echo vowel which harmonizes with the preceding vowel is added, e.g. Proto-Oceanic **manuk* 'bird', **ikan* 'fish', **niuR* 'coconut' > (a) South-east Solomonic languages *manu*, *iYa/i?a*, *niu*; but > (b) North-west Solomonic languages, *manuyu*, *viyana/iana*, *niunu*, respectively. Final vowels of Proto-Oceanic remain in the derived languages, e.g. PO **bebe* 'butterfly', **kutu* 'louse' > *bebe*, *Yutu/utu* in both the subfamilies. The vowel-ending languages have not retained any consonant-ending items as exceptions. This is a case highly regular typological change².

(ii) Proto-Indo-European voiced aspirated stops were a highly marked series, which merged with the voiced unaspirated in all branches except Indic, viz. Anatolian, Iranian, Balto-Slavic, Phrygian, Celtic, Albanian and Messapic (Ramat & Ramat 1998:38).

(iii) The shift of Old English *y y:* [ü ë] to corresponding unrounded vowels in Middle English was without any exception, although the sound change had spread through lexical diffusion over several centuries (Phillips 1984, 2001; Prins 1974).

2. I am indebted to Robert Blust and Malcom Ross for these valuable data.

(iv) Even chain shifts which affect the whole system can be brought under changes triggered by typological motivation.

5. Conclusion

The so-called Neo-grammarian regularity is the end product of several routes that a sound change may take through social factors, lexical diffusion and typological motivation, etc., which are not necessarily mechanisms of sound change. Most sound changes leave a residue of unexplained exceptions, but those changes, which have a typological goal (like the replacement of marked elements by unmarked ones) do not tend to leave such a residue of exceptions after they have run their full course.

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BIBLIOGRAPHY

- Baldi, Philip & Werth, Ronald N. 1978. *Readings in Historical Phonology: Chapters in the Theory of Sound Change*. University Park & London: The Pennsylvania State University Press.
- Burrow T. & Emeneau, M.B. 1984. *A Dravidian Etymological Dictionary* (Revised) (DEDR). Oxford: Clarendon Press.
- Bybee, Joan & Hopper, Paul (Eds.). 2001. "Frequency and the Emergence of Linguistic Structure". *Typological Studies in Language*, Vol. 45. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Greenberg, Joseph H. (Ed.). 1966. *Universals of Language* (2nd edn.). Massachusetts: The M.I.T. Press.
- . 1974. *Language Typology: A Historical and Analytic Overview*. The Hague: Mouton.
- Krishnamurti, Bh. 1958. "Alternations i/e and u/o in South Dravidian". *Language* 34.458-68. (Repr. Krishnamurti 2001: Ch. 2).

- . 1969. "Dravidian nasals in Brahui" in Agesthalingom & Kumaraswami Raja, N. (Eds.), *Seminar Papers in Dravidian Linguistics*, 65-74. (Repr. Krishnamurti 2001, Ch. 6).
- . 1978. "Areal and lexical diffusion of sound change: Evidence from Dravidian". *Language* 54.1-20. (Repr. Krishnamurti 2001, Ch. 10).
- . 1980. "A vowel-lowering rule in Kui-Kuvi" in Caron, B.R. et al (Eds.), *Proceedings of the Sixth Berkeley Linguistic Society*, 495-506. (Repr. Krishnamurti 2001: Ch. 12).
- . 1991. "The emergence of syllable types (C) ∇ C/(C) VCCV in Indo-Aryan and Dravidian: Conspiracy of convergence?" in Boltz, William & Shapiro, M.C. (Eds.), *Studies in the Historical Phonology of Asian Languages*, 160-75. (Repr. Krishnamurti 2001: Ch. 16).
- . 1998. "Patterns of sound change in Dravidian". *The Yearbook of South Asian Languages and Linguistics 1998*, 63-79. (Repr. in Krishnamurti 2001, 307-22).
- . 2001. *Comparative Dravidian Linguistics: Current Perspectives*. Oxford: Oxford University Press.
- . 2003. *The Dravidian Languages*. Cambridge, UK: Cambridge University Press.
- Labov, William. 1994. *Principles of Linguistic Change*, Volume 1: Internal Factors. Oxford, UK & Cambridge, USA: Blackwell.
- Lass, Roger. 1997. *Historical Linguistics and Language Change*. Cambridge: Cambridge University Press.
- Lehmann, Winfred P. 1967. *A Reader in Nineteenth-Century Historical Indo-European Linguistics*. Bloomington & London: Indiana University Press.
- Phillips, B.S. 1984. "Word frequency and the actuation of sound change". *Language* 60.320-42.
- . 2001. "Lexical diffusion, lexical frequency, and lexical analysis" in Bybee, Joan & Hopper, Paul (Eds.), 123-36.
- Prins, A.A. 1974. *A History of English Phonemes*. Leiden: Leiden University Press.
- Ramat, Anna Giacalone & Ramat Paolo (Eds.). 1998. *The Indo-European Languages*. London & New York: Routledge.

Appendix

(A) Examples for rules (a) to (m) in 2.3

(a) PD **key* ‘to do, make, create’. SD I: Ta. Ma. *cey*, To. *kiy*, Ko. *key*, *gey*, Koḍ. *key*, Tu. **geyi-*, *gai-*; SD II: Te. *cēy-*, Go. *kiy-*, *kī-*, Koṇḍa *ki-*, Kui *ki-*, *gi-*, Kuvi *kī-*, Pe. *ki-*, Maḍa *ki-*; CD: Pa. Oll. Gad. *key-*; ND: Br. *kē-* [DEDR 1957].

(b) PD **ciy-/cī-* ‘to give’. SD I: Ta. *ī(-v-, -nt-)* ‘to give to inferiors’, *īvi* ‘gift’, Ka. *ī-(itt)*, Te. *icc-* (*ī-*, *īy-/iyy-*, *iww-*), *īvi* ‘gift’: SD II: Go. *sī-*, *hī-*, *ī-*, Koṇḍa *sī-(sit-)*, Kui *sīva (sīt-)*, (K.) *hī-*, Kuvi *hī-(hūt-)*, Pe. *hī-(hūt-)*, *sī-(in songs)*, Maḍa *hī*; CD: Kol. Nk. *sī-*, Pa. *cī-* (past *ciñ- < *ciy-nd-*), Oll. Gad. *sī-(sīd-)*; ND: Kur. *ci’ (cicc-)*, Malt. *ciy-(cic-)* [DEDR 2598].

(c) PD **kāy* ‘to grow hot’. SD I: Ta. *kāy*, Ma. *kāyuka*, Ko. *kāy*, To. *kōy*, Koḍ. *kāy*, Tu. *kāy*, Ka. *kāy*; SD II: Te. *kāⁿgu v.i.*, *kāⁿcu v.t.*, Go. *kās- v.i.*, *kāp v.t.*, Koṇḍa *kāy-, v.i.*, *kāp- v.t.*, Kui *kāg-*, *kānd- v.i.*, *kās- v.t.*, Kuvi *kāy-, kād- v.i.*, *kāp- v.t.* Pe. Maḍa *kāy v.i.*; CD: Kol. Nk. *kāng- v.i.*, *kāp- v.t.*, Pa. *kāp- v.t.*, Oll. *kāyp- v.t.*; ND: Kur. *xāy-*, Malto *qāy- v.i.*, Br. *xāxar* ‘fire’ [DEDR 1458].

(d) PD **cīnt-* ‘date-palm’. SD I: Ta. *īntu*, *īñcal*, Ma. *īntal*, Ka. *īcal* (*< *īn-ccal < *īntt-al*); SCD (SD II): Te. *Ī ta* (*< *īn-tt-*), Go. *sīndi*, *hīndi*, *īndi*, Koṇḍa *sīntel*, Kui *sīta*, Kuvi *sīndi*; CD: Pa. Gad. *sīndi*; ND Kur. *kĪ ndā* [DEDR 2617].

(e) PD **mar-am/n* ‘tree’. PSD **mar-an/*mrā-n*: OTe. *mrānu* ‘tree’, Mdn. Te. *mānu*, Koṇḍa *maran*, *mrānu*, Kui *mrānu*, Kuvi *mrānu*, *mṛānu*; SD I: Ta. Ma. *maram*, Koḍ., Ka. *mara*; CD: Pa. *mari*, Oll. *marin*, Gad. *māren*; ND: Kur. *mann*, Malt. *man* [DEDR 4711a].

(f) PD *nīr* ‘water’. SDI, SD II, CD. Br. *ḍīr* id.

(g, h) PSD **cow-ar* (*< *cup. + ar*) ‘salt’. SD I **ow-ar*: Ta. Ma. *uvar*, Ka. *ogar*, Tu. *ubari*, *ogari*; SD II: **cow-ar* *>* (Te. *ogaru* ‘astringent’, lw. from Ka.), Go. *sovar*, *hovar*, *ovar*, Koṇḍa *sōru*, Pe. *hōr*: Kui *sāru*, Kuvi *hāru*, Maḍa *jār* [DEDR 2674a, b]

(i) PD **kay* ‘hand’. SD I: Ta. Ma. Ko. Koḍ., Ka. Tu. *kai/kay* To. *koy*; SD II: Te. *cēyi*, also *kai-*, Go. *kai*, Koṇḍa *kiyu* (pl. *ki-ku*), Kui *kaju*, Kuvi *keyu*, Pe. *key*, Maḍa *kiy*; CD: Kol. Nk. *kī*, Pa. *key*, Oll. Gad. *kiy*; ND: Kur. *xekkhā*, Malt. *qeke* [DEDR 2023].

(j-i) PD **yAtu* 'goat, sheep'. SD I: Ta. *yātu*, *ātu*, Ma. *ātu*, Ko. *ār*, To. *ōd*, Kod. *ādī*, Tu. *ēdī*, SD II: Te. *ēta* 'ram', Go. *ēti*, Kui-Kuvi *ōda*: ND: Kur. *ērā* 'she-goat', Malt. *ēre*, Br. *hēt* || > Skt. *ēḍa-*, *ēḍī-*, *ēḍaka-* [DEDR 5152].

(j-ii) PD **nēntu* 'time, day'. SD I: Ta. *nānru*, *nānru*, Ma. *nānnu*; SD II: Te. *nēⁿdu* 'today', Go. *nēnd*, Koṇḍ *nēnru*, Kuvi *nēcu*, *ninju*, Pe. *nēnjen*, Manda *nēnj* (*e*) 'today' [DEDR 2920].

(k) PD **uḷ-u* 'to plough, dig up'. SD I: Ta. *uzu*, Ma. *uzu*, Ko. *ug*-(*uṛt*-), To. *usf*-(*uṣt*-), Kod. *ūl*-(*upp*-, *utt*-), Tu. *ūduni*; SD II: Te. *dunnu* (< **dunn*- < **uḷ-n*-) v.t., *dukki* (< **dukk*- < **uḷ-kk*-) n. 'ploughing, tillage', Go. *ur*-, Koṇḍa-Kui-Kuvi-Pe.-Manda *rū*-(*rū-t*-); CD: Kol. Nk. *ur*-, Pa. *ur*-, Gad. *ūd*-; ND: *uy*-(*uss*-) 'to plough', Malt. *us*- 'to turn up as pigs do' [DEDR 688].

(l-i) PD **kaḷam/-an* 'open space, threshing floor'. SD I: Ta. *kaḷam*, *kaḷan*, Ma. *kaḷam*, Ko. *kaḷm*, To. *koḷṇ*, Kod. *kaḷa*; SD II: Te. *kaḷlamu*, *kaḷanu*, Go. *kaṛā*, *kaḷam*, Koṇḍa *kaṛan*., *kaḷan*, Kui *klai*, Kuvi *kalōmi*, *krānu*, Manda *kāra*; CD: Kol. *kalave*, Nk. *kaḷave*, *kalay*, Pa. *kali*, Gad. *kalin*; ND: Kur. *xall* 'open field', Malt. *qalu* [DEDR 1376].

(l-ii) PD **kaṇ* 'eye'. SD I: Ta. Ma. Ko. *kaṇ*, To. *koṇ*, Kod. Tu. *kaṇṇi*, Ka. *kaṇ*, *kaṇṇu*; SD II: Te. *kanu*, Go. *kan*, *kaṛ*, Koṇḍa *kaṇ*, Kui *kanu*, Kuvi *kanu*, Pe. *kaṅga*, Manda *kan*; CD: Kol. Nk. Pa. *kan*, Oll. *kaṇ*, Gad. *kanu*; ND: Kur. *xann*, Malt. *qanu*, Br. *xan* [DEDR 1159(a)].

(m-i) PD **kur-V-* 'thigh'. SD I: Ta. *kurāṅku*, Ma. *kuraku*, *kuravu*, Ko. *korg*; SD II: Te. *kurūwu*, Go. *kurki*, *kohki* (< **kuR-kk*-; *r* becomes R, voiceless alveolar trill, before a voiceless stop), Koṇḍa *kurgu* (pl. *kuRku*), Kui *kuju* (pl. *kuska*), *kujugu*, Kuvi *kudgu*; CD: Kol. *kudug* (obl. *kudg*-), Pa. *kudu* (pl. *kudul*), NE *kudū*, Oll. *kuyug* (pl. *kuygul*); ND: Kur. *xosgā* 'leg, thigh', Malto *qosge* [DEDR 1840].

(m-ii) PD **watt-/wat-V-* 'to dry up'. SD I: Ta. *varru* 'to evaporate', Ma. *varruka*, Ko. *vat*-, Kod. *batt*-, Ka. *battu*, *baccu*, Tu. *batteli* 'leanness'; SD II: Te. *wattu* 'to dry up', Go. *vatt*-, Koṇḍa *vaR*-, Kui *vas*-, Pe. Ma. *vac*:- CD: Kol. *vat*-, Pa. *vett*-, *vett*- 'to wither', *vetip*-(*vetit*-) v.t. 'to dry up something', Oll. *vat*-, Gad. *vatt*- v.i., *vatp*- v.t. 'to dry up in sun'; ND: Kut. *batt*- 'liquids decrease by evaporation', Malt. *bat*- '(water) to dry up', Br. *bārring* 'to become dry', *bārif*- 'to make dry' [DEDR 5320]

(m-iii) PD **on-tu* 'one'. SD I: Ta. *onru* (> *onṇu*), Ma. *onnu*, Ko. *od*-, *ond*-, To. *wid*-, Kod. *ondī*, Ka. *ondu*, Tu. *oṇji*: SD II: Te. *oṇḍu*, Go. *uṇḍī*, *undī*, Koṇḍa *unri*; ND: Kur. *ōn*, *ōnd*, Malt. *-ond*, Br. *asiṭ* [DEDR 990d].

Map 1
The Dravidian languages and their geographical distribution

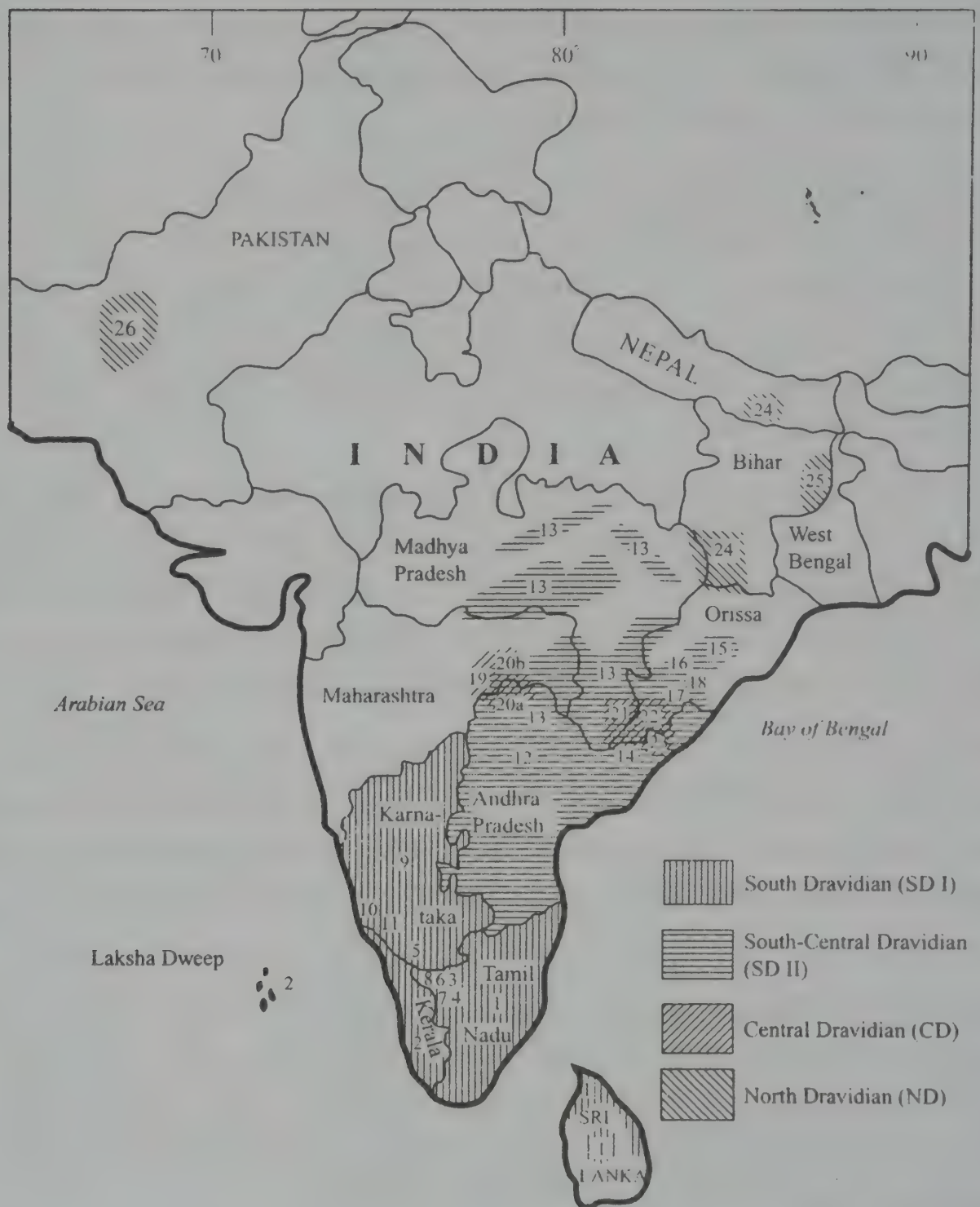
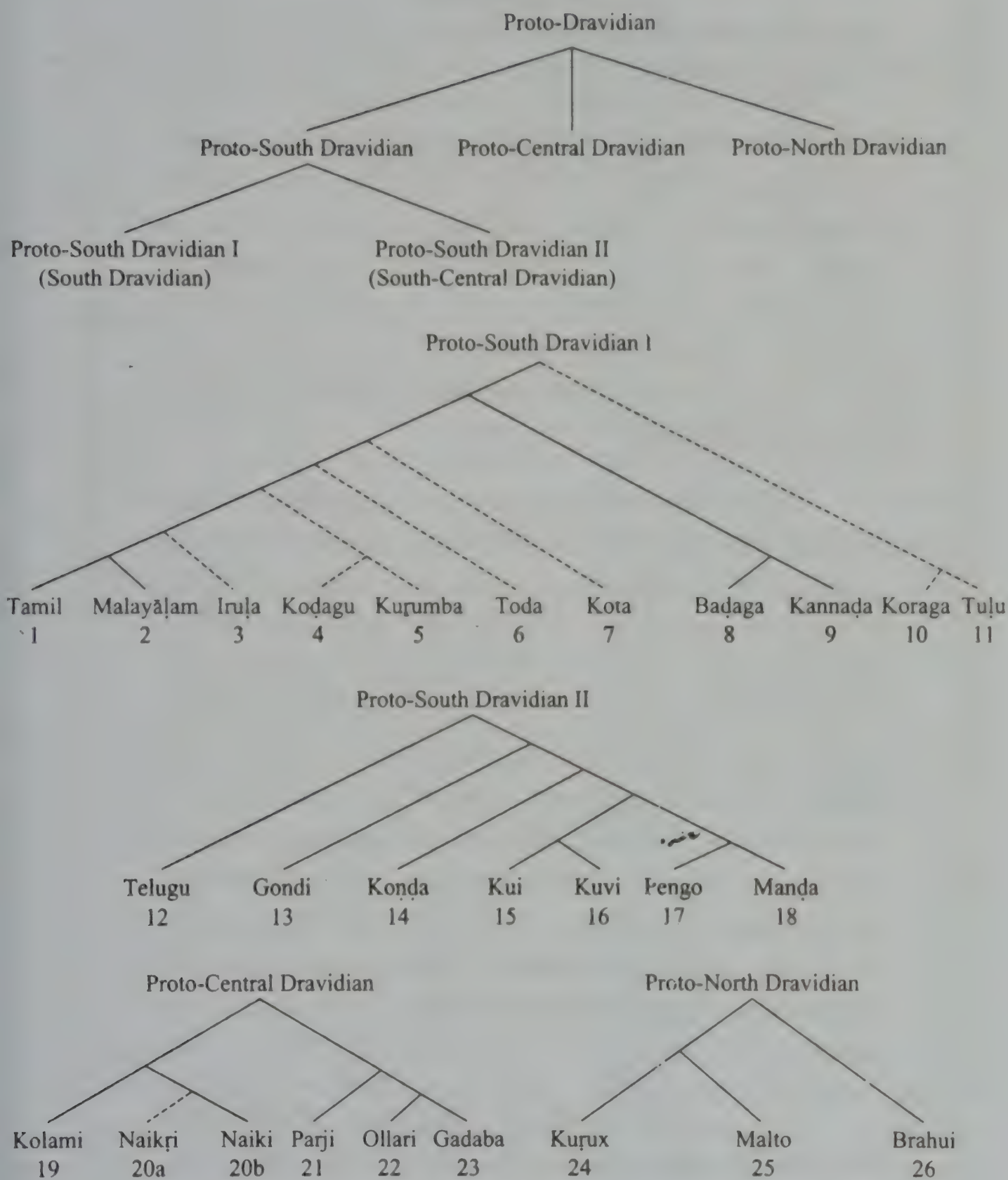


Figure 1
The Family tree of Dravidian with four subgroups



Broken lines reflect uncertainty as to a language’s position within the group.

PHONOLOGICAL RECONSTRUCTION OF SOUTH DRAVIDIAN LANGUAGES

B. Gopinathan Nair

2009, HB., Crown 1/4, Pp. xxiii + 480. Rs. 600/- (US\$ 120/-)

This book deals with the reconstruction of the phonological structure of South Dravidian languages by a comparative study of eight languages viz. Tamil, Malayalam, Kota, Toda, Kannada, Kodagu, Tulu and Telugu. The data is primarily based on *Dravidian Etymological Dictionary* by T. Burrow and M.B. Emeneau. Further supplementary material is taken from other sources also especially in the case of Malayalam dialects.

Regarding the inclusion of Telugu under SDr naturally one may ask whether it does not violate the principles of comparative linguistics in subgrouping the member languages as it is usually held that though geographically Telugu is a SDr language, genetically it belongs to CDr group. It is stated in the introduction why Telugu is included under SDr in the present study. Besides, the differences of opinion of subgrouping of Dravidian based on the traditional tripartite hypothesis and the later fourfold division proposed by Krishnamurti (1975) have been delineated under subgrouping. Also the views of other scholars. This would justify the inclusion of Tulu and Telugu under PSDr in a wider sense.

It is the author's Doctoral Dissertation completed under the guidance of late Prof. V.I. Subramoniam in the Department of Linguistics, University of Kerala three decades ago.

It will be a useful reference tool to those engaged in South Dravidian studies.

THE EVOLUTION OF THE FINITE VERB IN DRAVIDIAN

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Abstract

*This paper argues that the predominant finite verb system with pronominal suffixes in Dravidian developed out of participial nouns and investigates the origin of the pronominal suffixes in detail. A participial noun formed on the verbal adjective by the addition of a pronominal suffix or, in the case of the 3rd person, the demonstrative pronoun itself or its contracted form (e.g. OTa. cey-t(-a) + avan/cey-t + o:n/cey-t + a:n 'one (m) who did') can play several roles in a sentence. It can function as the subject, take a case suffix or postposition or, in the case of an equational sentence, function also as the predicate. The participial noun in the predicate role evolved as the finite verb. When it functions as a finite verb it always shows contractions of the 3rd person pronouns as in the case of the pronouns of the 1st and the 2nd persons; that is, OTa. cey-t + o:n/cey-t + a:n 'he did' can function as a finite verb but not cey-t + avana. Old Tamil and Old Kannada have participial nouns of 1st and 2nd persons also. The finite forms with the reflexes of non-past *-um (with no following pronominal suffixes) in Tamil, am, Malaya:lam, Kota, a, Telugu (Old/dialects of Modern Telugu) and Kolami and the similar Old Kannada, Old Telugu past forms with -en(u)/-iyen(u) are survivals from a pre-Dravidian finite verb system with no pronominal suffixes. Similarly, some finite forms with pronominal suffixes u-t-um 'we will rise', and like Old Ta. ez-u-k-am 'we will sing' that have no corresponding participial nouns with the same suffix are also survivals from a pre-Dravidian stage. In Malaya:lam, future forms with *-um first spread to the 1st and the 2nd persons and then this system served as the model for discarding pronominal suffixes in the other tenses. Forms with pronominal suffixes for 1st and 2nd persons became established by the time of Proto-Dravidian itself. In the case of the 3rd person of the pre-Dravidian stage, there were neither the pronominal suffixes nor the*

distinctions expressed by them. However, forms with pronominal suffixes evolved at the Proto-Dravidian stage itself but they coexisted in some of the languages with those that are survivals from the older system.

0 Introduction

0.1 It is a well established fact that in Dravidian, the pronominal suffixes of finite verbs show close resemblance to the corresponding personal or distant demonstrative pronouns. Because of this fact, Caldwell (1856 [1956: 481]) thinks that the Dravidian verb was originally devoid of the pronominal suffixes (as in Malayalam) and that the pronouns were later added to it for the sake of clarity. Those pronouns, according to him, were in course of time contracted into the present-day suffixes due to 'frequency of use and rapidity of enunciation' and their unaccented position. He (1856 [1956: 486]), however, hastens to add: 'The period when the Dravidian verb was uninflected must have been long prior to the separation of the present tongue [i.e. Proto-Dravidian] into dialects, in all of which, even in the rudest, a system of inflexions have been developed.' Undoubtedly the process outlined above must have been responsible for the creation of the pronominal suffixes but it must have happened in the case of forms for the 1st and 2nd persons before the Proto-Dravidian period itself; we shall see below that the same process operated in the 3rd person at a later stage of Proto-Dravidian (§0.3).

0.2 At this point, we have to ponder over the question: what was the category of the verb to which the pronoun was added to create the system of finite verbs with pronominal suffixes? It is more than probable that the category in question was the verbal adjective. We can say that the finite verb system with pronominal suffixes basically evolved from participial nouns with the structure: verbal adjective (past/non-past/negative) + pronoun (only the distant ones in the case of the 3rd person). As we shall see below, there is a close resemblance between participial nouns and finite verbs in the matter of structure in Old Tamil (§8.2.1.1.4) and Old Kannaḍa (§8.2.1.7.4). A participial noun can function as the subject or, in the case of an equational sentence, as the predicate; it can also take a case suffix or postposition depending on its function in other roles in a sentence.¹ Its use in the predicate position paved the way for its conversion into a finite verb.

1. Caldwell (1856 [1956: 540]) has already noted that participial nouns are formed from the relative participles: '... participial nouns, which are formed from the relative

0.3 There are two types of exception to the above statement; these exceptional forms are survivals from a pre-Dravidian finite verb system. One of them is the set of finite forms with non-past *-um followed by no pronominal suffixes in Old Tamil and some other languages and the similar Old Telugu past forms with -en(u) (variant: -iyen(u) after a base with no long vowel or double consonant, e.g. an-iyen(u)/an-en(u) 'he/she/it/they (n) said').² The forms with the reflexes of *-um occur in the following languages: Tamil (-um [Table 8.**]), Malayalam (-um [§1.3-4]), Kota (-o: [§1.8]), Old Kannada (-kum/-gum), Old Telugu (-un(u) [Table 8.**])³ and Kolami (durative with -un, e.g. si:-un 'she/it is/was giving' [Emeneau 1955: 75-78]). The second exceptional type comprises future tense forms that have pronominal suffixes but are not developments from participial nouns; such forms are found in many languages. Examples are the Old Tamil future forms with -tu (∞ -ttu) (only 1pl, 2sg, 2pl) and -k (∞ -kk) (only 1sg, pl) (e.g. ezu-t-um 'we will rise', po:ku-t-i 'you (sg) will go', pa:tu-k-am 'we will sing') and Old Telugu future forms with -du (∞ -tu) (only 1st and 2nd persons) (e.g. ce:yu-du-nu 'I will do', naḍa-tu-nu 'I will walk') (Ramaswami Aiyar 1938: 763, 767-69).

0.4 In Old Tamil, a form like cey-t-a:n functions both as a participial noun ('one (m) who did') and as a finite verb ('he did'). Ancient Tamil grammarians have noted the difficulty in discriminating between a

participle of each tense, and retain the time of the tense to which they belong ...'. In Tamil (as well as in Malayalam and Kannada) the a of the relative participle (or verbal adjective) and the a of the pronoun result into a single a (e.g. *va-nt-a + avan > va-nt + avan 'one (m) who came'; this causes some confusion regarding the status of the first constituent (for example, Rajam (1992: 645) thinks that the pronoun is directly added to the past/non-past/negative stem). But forms like OTa. ariy-um-o:n 'he who will know' and OTe. vacc-ina + va:ṇḍu 'one (m) who came' clearly show that the base here is the verbal adjective as recognized by Caldwell. In cases like OTa. varu-p-avan 'one (m) who comes' there is evidence that the underlying non-past adjective varu-p-a was there in the language at an earlier time.

2. There are a few exceptional occurrences in Old Tamil of -untu (< -um-tu) in which the non-past -um is followed by 3nsg -tu, e.g. ki:z ni:ra:n māi:n vazaṇk-un-tu (PR 396.1) '(the) fish₃ move₄ (around) in₂ low₁ waters₂' (Rajam 1992: 618).
3. The north coastal dialects of Modern Telugu, which preserve the Old Telugu future tense with the semantic change future > irrealis ('would have VERB-ed') retain this suffix with the same distribution as in Old Telugu : va:ḍu/adi/avi occ-unu 'he/she/it/they (n) would have come'.

(1sg)	-e:n, -en	(1pl)	-a:m, -e:m, -am
(2sg)	-a:y, -o:y, -avai	(2pl)	-avir, i:(i)r, -ir
(3msg)	-avan, -a:n, -o:n, -an	(3hpl)	-avar, -a:r, -o:r, -ar

0.6 As has been noted by Caldwell (1856 [1956: 540]) forms like OTa. *varu-p-avan* ‘one (m) who will come’ have the non-past adjective **varu-p-a* ‘that will come’ present in Tamil only in this construction but the corresponding forms of Kannada are free forms (e.g. *baru-v-a huduga/hudugi* ‘(the) boy₂/girl₃ that₁ comes₁’). While Old Tamil has participial nouns of 1st and 2nd persons in addition to those of the 3rd person, such forms are absent in Modern Tamil (Agesthalingom 1979: 148). Examples (OTa.): (1sg) *ira-nt-e:n* ‘I who passed over’, *e:zu-v-e:n* ‘I who will rise’, *onr-Ø-e:n* ‘I who will not unite’; (1pl) *punar-nt-o:m* ‘we who joined’; (2sg) *ko:tu-tt-o:y* ‘you (sg) who gave’; (2pl) *punar-nt-i:r* ‘you (pl) who joined’. The pronouns of the 1st and 2nd persons underwent contractions (**ya:n* > *-e:n*, **ya:m* > *-e:m/-o:m*, etc.) in pre-Dravidian itself in both participial nouns and finite verbs; on the other hand, we have participial nouns of the 3rd person in Old Tamil with the full forms **avan/aval/avar* as well as with their contractions. Such Old Tamil forms lend support to the hypothesis that finite verbs evolved from participial nouns. However, there are a few minor differences of structure between the two categories which, however, do not stand against the hypothesis. While participial nouns optionally show the non-contracted forms of (3msg) *avan*, (3fsg) *aval* and (3hpl) *avar*, the finite verbs always show only the contracted forms of these. This difference between the two has something to do with the normal positions these forms occupy in a sentence. A finite verb normally occurs in the final position of a sentence; since this is a weak position with low stress obligatory contraction is not unexpected.⁵ While finite verbs with non-past *-um* do not take pronominal suffixes, participial nouns with the same suffix (but without the *u* in some cases) found rarely in Old Tamil do have them: *ariy-um-o:n* ‘he who will know’, *un-m-a(:)r* ‘they (h) who will eat’, *en-m-a:r* ‘they (h) who will praise’ (Ramaswami Aiyar 1938: 764-65). Old Kannada forms like *ba-nd-ar*

(3fsg) *-aval, -a:l, -o:l, -al*

(3nsg) *-atu*

(3npl) *-avai, -a*

Suffixes with a short vowel (except *-atu* and *-a*) are not found after the negative suffix.

5. Modern Telugu (standard dialect) affords another example for this. While a participial noun does not show contraction the corresponding finite verb shows contraction with the deletion of the *v* of the pronoun *va:du : i: ma:ta ceppinava:du* (not **ceppina:du*; but non-standard: *seppino:du*) *kuma:r* ‘Kumar₄ (was) (the) one₃ (m) who₃ told₃ this₁ matter₂’.

function both as participial nouns ('they (h) who came') and finite verbs ('they (h) came') in a similar way.

0.7 It can be argued that both the morphological non-past negative forms found in all languages except Kurux-Malto (e.g. OTa. *ceyy-Ø-e:n* 'I will not do', *ceyy-a:-tu* 'it will not do', Te. (O) *ce:y-a-nu/(M)* 'ceyy-a-nu 'I will not do' with -a present in all the forms) and the morphological past negative forms found in Konda-Kuwi and Kolami-Naiki (with the past suffix following the negative suffix, e.g. Konda *nes-?-et-a* 'I did not know') are also derived from participial nouns. The former are derived from the participial nouns based on the negative adjective with the negative suffix **-va:(y)* (e.g. OTa. *murai ceyy-a: mannavan* '(the) king₃ that₂ does₂ not₂ do₂ justice₁') and the latter on those based on the past negative adjective with **-va:(y)-tt-a/i* (negative suffix - past suffix - adjective suffix); Malayalam and Kui-Kuwi make a distinction between non-past negative adjective and past negative adjective (e.g. Kui *ko:-?a-n-i* 'that does/will not reap', *ko:-?a-t-i* 'that did not reap'). The non-permitted sequence of two vowels is avoided in different ways in the languages. In Tamil-Kannada -a: (negative; < **-va:(y)*) > Ø before a vowel, in Telugu (and other Central Dravidian languages) the vowel of the pronominal suffix is deleted after -a (< **-va:(y)*) which is found in all persons and in Tulu (e.g. *ke:n-ay-E* 'I do not hear') the y glide cropped up between the negative -a (< **-va:(y)*) and the pronominal suffix that begins with a vowel (with no deletion of either vowel as in the other languages).

0.8 That the Modern Telugu past paradigm developed out of participial noun system becomes evident from even a superficial glance, e.g. *cepp-E:-ḍu/cepp-in-a:ḍu* 'he told' (< *cepp-ina + va:ḍu* 'one (m) that told'). Forms almost identical with the modern forms (with -in) are found occasionally in the first Old Telugu text *Maha:bha:ratamu* itself:

dharmatanayu[n]ḍu ...

... ba:lakulanu nela[n]tapinḍu[n]

dagu dhanamunun indraprasthanagaramunaku[n̄]

je:rpa valayuta ma:k ella[n̄] jeppina:nḍu⁶ (*Mausalaparvamu* 124)

'Dharmara:ja₁ told₁₁ all₁₀ of us₉ (about) (the) need₈ to₇ bring₇ children₂, women₃ and enough₄ wealth₅ to₆ Indraprastha₆ (a city)'

6. Note that, in *ceppina:[n]ḍu*, c > j because of the preceding nasal.

0.9 From Tables 3 and 4 we can arrive at the conclusion that the pronominal suffixes for the 1st and 2nd persons can be reconstructed for Proto-Dravidian without much problem. This means that finite verbs with 1st and 2nd person pronominal suffixes existed at the Proto-Dravidian period. However, Old Tamil future tense (Table 1) and Old Telugu past and future tenses (Table 2) with no pronominal suffixes in the 3sg and 3npl and Old Kannada future forms with no personal suffix after future -k/gum agreeing with any 3rd person subject indicate that at the earliest stage of Proto-Dravidian there were no pronominal suffixes in the 3rd person (as in the case of -k/gum forms of Old Kannada and the past/present/future paradigms of Kota).[§1.8]). Old Tamil future 3rd person plural forms with -p (∞ -pp) (future) followed by the pronominal suffix -a common to human plural as well as non-human plural (§2.7.4) are also probably indicative of an earlier stage with no distinct pronominal suffixes for the 3rd person. This stage must have been followed by a stage at which forms with pronominal suffix first developed for hpl (as in Old Tamil and Old Telugu) and later for msg, nmsg and npl. The pronominal suffixes 3msg *-a:nt(u), 3hpl -a:r, 3nmsg *-at(u), 3npl *-av are reconstructable for the later stages of Proto-Dravidian. In the case of Old Tamil (other than 3nsg and npl) and Old Kannada, the forms without the pronominal suffixes coexist with those with the pronominal suffixes but the latter are with a different tense marker; to be more specific, pronominal suffixes do not occur after OTa. -um and Old Ka. -k/gum, e.g. (OKa.) avam ir-kum/ir-p-am ‘he will be’. The replacement of such semantically complex forms by forms with pronominal suffixes created for the purpose of less ambiguity in the later stages of these languages probably illustrates the way in which verb forms with pronominal suffixes developed in course of time.

Table 1
3sg/npl future tense forms of Ta. cey- ‘to do’

	avan ‘he’	aval ‘she’	atu ‘it’	avai ‘they (n)’
OTa.	ceyy-um-Ø ‘will do’			
O/MTa.	cey-v-a:n	cey-v-a:l	ceyy-um-Ø	

Table 2
3sg/npl past and future tense forms of Te. ce:yu- 'to do'

	Past (O)	Past (M)	Future (O)	Future (M)
(O) va:[n]du (M) va:du 'he'	ce:s-en(u)-Ø 'did'	ce:š-E:-du/ ce:s-in-a:du	ce:y-un(u)-Ø 'will do'	ce:s-ta:-du
adi 'she, it'		ce:s-in-di		ce:s-tun-di
avi 'they (n)'		ce:š-E:-yi/ ce:s-in-ayi		ce:s-ta:-yi

0.10 The presence of pronominal suffixes signalling the agent in the finite verb allows for optional deletion of the subject pronoun or, in the case of the 3rd person, the pronoun or the noun for which it is the substitute. In the case of a particular noun, it can be retrieved in the context from the previous or a still earlier sentence. For example, in Modern Telugu, the pronominal suffix -du in the finite verb occ-E:-du 'he came' indicates that the agent of it refers to a male person and consequently the pronoun va:du 'he' or a noun like kuma:r 'Kuma:r' or annayya 'elder brother' can be optionally omitted. When a noun is omitted, it can be understood from the previous or a still earlier sentence.

kuma:r u:riki vellE:du. (va:du) ippude: occE:du

'Kuma:r₁ went₃ to₂ (some) town₂. (he₄) came₆ (back) just₅ now₅'

1 Descriptive Study

1.1 The pronominal suffixes of the daughter languages are given in Tables 3 and 4. Each of the languages Malaya:lam (no pronominal suffixes especially in the later stages [§1.3-4]), Pengo (a separate category for fpl [§2.9.4]) and Kurux-Malto (separate categories for masculine and feminine in the 2sg [§2.3.5]) has a unique feature not found in any other language.

1.2 A few general comments applicable to all or most of the pronominal suffixes are in order here.

(i) The pronominal suffix closely resembles the corresponding pronoun of the language or, especially, the final part of it. Therefore, when a pronoun is modified in a language by some analogical change or by the addition of some phonological material, its effect is found on the corresponding pronominal suffix. For example, when the 1sg pronoun of Pengo optionally takes an additional $e\eta$, the corresponding suffix also is modified so that it contains η . Similarly in Brahui the 1st pl pronoun *nan* 'we' with *n* instead of the expected *m* forced the corresponding suffix to replace its $*m$ by *n* (§2.2.2).

(ii) A general feature of the pronominal suffixes that is found in many languages is that one that begins with a vowel loses that vowel when it occurs after a suffix that ends in a vowel; for example, OTa. 3nsg *-atu* loses its *a* after the negative *-a:*, *cey-t-atu* 'it did' ~ *ceyy-a:-tu* 'it will not do'.

(iii) In Old Tamil, a long vowel of the pronominal suffix is often shortened after the *ca:riyai -an* that is optional after the regular past suffix and after a tense marker that has a vowel in it, e.g. *cey-t-e:n* ~ *cey-t-an-en* 'I did', *cey-kuv-en* 'I will do'.

(iv) In Old Telugu, a pronominal suffix changes its final *u* to *i* after the past suffix which ends in *i*, e.g. *ce:s-iti-ni* 'I did' but *ce:yu-du-nu* 'I will do'.

(v) If a language has the exclusive ~ inclusive distinction in the pronoun but does not have it in the finite verb, the pronominal suffix given under the 1pl (excl) suffix functions as the common one to show agreement, e.g. Ta. *na:ηkal* 'we (excl)'/*na:m* 'we (incl)' *pa:r-tt-o:m* 'we saw', Te. *me:m* 'we (excl)'/*manam* 'we (incl)' *cu:š-E:-m* 'we saw'.

1.3 In Modern Malayalam pronominal suffixes are absent in all the three tenses: *cey-tu* '(subject) did', *ceyy-unnu* '(subject) am/is/are doing', *ceyy-um* (subject) 'will do'. As a result there is no difference between the past finite form and the past adverb in that language; for example, *po:y-i* means 'having gone' as well as '(subject) went'; however, if the past stem ends in a consonant, it takes at the end ∂ in the past adverb and (rounded) *u* in the finite form, e.g. *va-nn ∂* 'having come', *va-nnu* '(subject) came'. However, Old Malayalam texts right from the *Ra:maccaritam* (12th century) and the inscriptions before that period show finite forms with pronominal suffixes side by side with

those without them. The presence of finite verbs with pronominal suffixes in Old Malayaḷam makes it difficult for us to conclude that the situation in Modern Malayaḷam is a case of preservation right from the pre-Dravidian period. After a thorough investigation, Ramaswami Aiyar (1936: 52-62) arrived at the conclusion that the loss of pronominal suffixes in Malayaḷam was a gradual process and that one cannot argue that the situation in the present-day language represents the situation in Proto-Dravidian. His argument rests mainly on the following evidence:⁷

(i) There is evidence in the literary texts to show that there is a gradualness in the deletion of pronominal suffixes. 'Though personal endings for tense-forms were common in the Old Mal. Texts, there do exist instances in these texts of finites without personal terminations. This absence of terminations gradually affects more and more categories of finites with the passing of time.' (Ramaswami Aiyar (1936: 53). (The inscriptions also show the same trend (Sekhar 1953: 105)).

(ii) *Li:la:tilakam* (14th century Malayalam grammar) mentions that verbs with pronominal suffixes like *va-nt-a:n* 'he came' and *iru-nt-a:n* 'he was' are of low caste dialectal forms. This indicates that pronominal suffixes have not disappeared from the language in all dialects at that time. In fact, Aminidi:v Malayalam, a dialect spoken by the Moplahs of the Aminidi:v and Lakkadi:v islands, even now retains pronominal suffixes. Evidently this relic dialect preserves the original state of affairs without being affected by the innovation in the major area.

1.4 It should be noted that the loss of pronominal suffixes in Malayalam is not a phonetic change but it is an analogical change of replacement of forms with pronominal suffixes by those that do not have them. The future forms with -um, which is never followed by a pronominal suffix in any language, were originally confined to 3rd person (msg, fsg, nsg and npl in Old Tamil and Old Telugu but to all 3rd person categories in Old Kannada (with a preceding k/g in the last mentioned language). In

7. His other argument that Malayalam, which was only a dialect of Old Tamil until around the 6th century AD cannot represent the Proto-Dravidian situation is unacceptable since dialects (or one of the languages of a subgroup) are known to preserve archaic features not found in others. Note, for example, that Naikṛi preserves *l (after a non-front vowel) unlike Kolami with which it is closely related.

Malayalam these forms were analogically extended to 1st and 2nd persons replacing forms with the suffix -v/-pp, e.g. var-um '(subject) will come' replaces 1sg varu-v-e:n 'I will come', etc (Ramaswami Aiyar 1936: 60). It is possible that the trend of using the bare stem (without pronominal suffixes) in agreement with subjects of all persons was extended from the future tense to the other two tenses. Ramaswami Aiyar (1936: 59) notes 'the conspicuous absence in literature of personal endings for the third person present forms'; this indicates that the 3rd person forms of the past and the present tenses, which originally had no pronominal suffixes as in the case of the future tense, were extended in due course to the 1st and 2nd persons.

1.5 The inclusive ~ exclusive contrast in the 1pl finite verbs is found only in the following languages: Kota-Toda, Telugu, Gondi, Konda-Pengo-Manda-Kui-Kuwi, Parji and Kurux-Malto (§2.2).

1.6 When we look at the situation in the 3rd person regarding pronominal suffixes, we notice that their presence is not so uniform as in the 1st and the 2nd persons. Some of the languages lack them in some or all the paradigms while some others have them but make minimum distinctions expanding their original semantic values. The languages concerned are Old Tamil, Malayalam, Kodagu, Kota, Toda, Old Kannada, Old Telugu and Brahui. The fsg category is distinguished from others only in South Dravidian minus Koraga; Koraga, Central Dravidian and Kurux-Malto retain the Proto-Dravidian situation by merging the fsg category with the nsg category. As we have seen (§1.2), Modern Malayalam has no pronominal suffixes for any person in any paradigm though the older dialect has forms with and without them from the beginning. Old Tamil future-habitual forms with -um not followed by pronominal suffixes agree with msg/fsg/nsg/npl subject (the only exception is hpl). Old Kannada future-habitual forms with -kum/-gum not followed by pronominal suffixes agree with all 3rd person subjects including hpl. Old Telugu past forms with -en(u)/-iyen(u) and future-habitual forms with -un(u) (< *-um) (both of them not followed by pronominal suffixes) agree with msg/fsg/nsg/npl subject as in the case of Old Tamil -um.

1.7 Kodagu and Toda also show one and the same finite form for all 3rd person subjects but this seems to be a later development in these

languages. The presence of -*ëri*, which is normally the hpl suffix, in the finite forms of Kodagu indicates that there has been extension of it to the other 3rd person categories.

1.8 In Kota, the paradigms of past (va-d-uk-o: '3rd person(s) came'), present (va-d-o: '3rd person(s) come(s)') and future (va-kug-o: '3rd person(s) will come') have only one form for all categories of the 3rd person but other paradigms like the voluntative carry distinctions. Since the pronominal suffix -o: in the former ones is from non-past *-um (analogically extended to the other tenses also [Subrahmanyam 1991: 53]), the situation in this is similar to the Old Kannada one with -kum/-gum.

1.9 Loss of gender distinction and extension of the neuter forms to other categories is a common trait in Toda which must have been responsible for the loss of distinction in the pronominal suffixes. The presence of -t/-*θ* (< 3nsg *-(t)t(u) (§2.8); it occurs in past I and present-future I paradigms, e.g. po-d-t '3rd person(s) (will) come(s)') as one of the 3rd person suffixes in this language is indicative of the merger of the other categories with the nsg category. The other three suffixes, namely -u, -k and -n are not pronominal suffixes in origin. -u found in present-future II (e.g. pi:um '3rd person(s) (will) go(es)') is from future-habitual *-um. -k found in past II (e.g. podšk [*< *va-nt- + iru ~ kk-um*] '3rd person(s) (will) come(s)') and voluntative negative is the strong verb formative *-kk in origin. -n found in subordinate paradigms (e.g. po-d-n [*< *va-nt-an-*] '(when) 3rd person(s) came') may be the remnant of the ca:riyai -an which often follows the past suffix before pronominal suffixes in Old Tamil.

1.10 Brahui shows only sg ~ pl contrast without any gender contrast. -ir (∞ -e:r) of the plural category, which comes from original hpl *-a:r, indicates that this category has been extended at the expense of the npl category.

1.11 The hpl (i.e. mpl/fpl/mfpl) category of South Dravidian, Telugu and Kurux-Malto (and of Proto-Dravidian) with the suffix *-a:r got its semantic value reduced to mpl/mfpl in Gondi-Kuwi and Kolami-Parji; the value of fpl is removed from this and is merged with original npl category in these languages.

Table 3
Pronominal suffixes of the 1st and 2nd persons

L	1sg	1pl (excl)	1pl (incl)	2sg	2pl
OTa.	-e:n̄, -en̄, -an̄, -al	-e:m, -em, -a:m, -am, -o:m, -um		-i, -a:y, -o:y, -ai	-i:r, -ir
MTa.	-e:n̄	-o:m		-a:y	-i:r-kal (Sp) -iŋ-ke[l]
OMa.	-e:n, -an	-o:m		-a:(y)	-i:r
Ir.	-en	-e:m		-a	-iri
Kod.	-i, -ë	-a		-iya	-ira
Ko.	-e:(n)	-e:m	-o:(m)	-i:	-i:m, -i:r
To.	-en, -in, -n	-em, -im, -m	-um	-y, -ty	-š, -tš
Ka.	(O) -em	(O) -em/ -ev(u)	(O) -am	(O) -ay/ -ai/-e	(O) -ir
	(M) -e(nu)	(M) -evu		(M) -e	(M) -iri
Ba.	-e	-eyo	-o	-e	-i
Tu.	-E	-a		-a	-arī
Kor.	-e	-a		-a	-erī
Te.	-nu	-mu	(OH) -amu	(O) (-vu) (M) -vu	-ru
Go.	-o:n, -u:n, -a:	-o:m, -u:m,	-a:t	-i:	-i:t
Konda	-a	-ap	-at	-i ~ -id [-V	-i(n)der
Pe.	-aŋ	-ap	-as	-ay	-ader, -ider
Manda	-u, -i	-uŋ		-i	-ir
Kui	-e(nu), -i	-amu	-asu	-i	-eru
Kuwi	-e?ẽ, -i?ĩ	-omi	-ovi/-ayi	-i	-eri
Kol.	-u:n, -a:n	-u:m, -a:m	-a:m	-i:v	-i:r

Nk.	-un, -an	-um, -am		-i	-ir
Ga.	-en	-em		-et	-er
Pa.	-en/-an, -an	-om, -am, -um	(Imp) -ar (P) -umur	-ot, -at, -ut	-or, -ar, -ur
Kur.	-an	-am	-at	(m) -ay	-ar
				(f) -i	
Malt.	-in, -an, -tan	-am, -tam	-ey, -tey	(m) -e, -te	-ar, -tar
				(f) -i, -ti	
Br.	-iv, -e:v	-in		-is, -e:s	-ire, -e:re
[L = Language]					

Table 4
Pronominal suffixes of the 3rd person

L	3msg	3fsg	3nsg (Te to Malt) nmsg	3npl (Go to Pa) nmpl	3hpl (Go to Pa) m/hpl
OTa.	-a:ṇ, -aṇ -o:ṇ, (-um]) -Ø	-a:ḷ, -aḷ, -o:ḷ (-um]) -Ø	-atu, -tu (-um]) -Ø	-a (-um/-a:]) -Ø	-a, -a:r, -ar, -o:r
MTa.	-a:ṇ	-a:ḷ	-atu (-um]) -Ø	-a (-um/-a:]) -Ø	-a:r-kaḷ (Sp) -a:ŋ-ka[ḷ]
OMa.	-a:n	-a:ḷ	-atu	-a(va), -ana	-a:r
Ir.	-ä (< an)	-a[ḷ]	-udu, -adu	-ina[ḷ]	-a:ru
Kod.	-, -ëri				
Ko.	-a:n	-a:ḷ	-d		-a:r
	-o:				
To	-t, θ, -u, -k, -n				
OKa.	-am (-k/ gum])	-aḷ -Ø	-udu, -uttu -Ø	-avu -Ø	-ar -Ø

MKa.	-a(nu)	-a <u>ḷ</u> u	-te, -itu	-uvu	-aru
Ba.	-a	-a	-a(tu)	-o	-aru
Tu.	-e	(B) -aḷi (C) -ali	-i, -u, -ṇ <u>ḍ</u> u, -ndu	-a	-erī
Kor.	-i	-dī, -u			-erī
OTe. (past/ fut)	-Ø				-ru
OTe. (neg/ pres)	-[ṇ]ḍu	(neg)] -du, (pres)] -(a)di	(neg)] -vu, (pres)] -(a)vi		-ru
MTe.	-ḍu	-di, -du	-yi, -vu		-ru
Go.	-o:r/-o:l, -u:r	-a:, -u:, -Ø	-a:ṇ, -u:ṇ		-e:r, -i:r, -u:r
Konda	-an[r]	-at/-ad	-e		-ar
Pe.	-an	-at	(f) -ik (n) -iṇ		-ar
Manda	-un	-i, -in, -d	-iṇ		-ir
Kui	-enju	-e	-u, -o		-eru
Kuwi	-esi	-e	-u		-eri
Kol.	-a:n/-nd	-a:(d). -u:n, -a:n	-a:v, -e:v		-a:r, -e:r
Nk. (Ch.)	-e:n, -a:n	-d, -u:n, -a:n	-e, -a		-a:r, -e:r
Ga.	-en(d)	-e, -ṭe, -[d]	-ev		-er
Pa.	-ed/-od, -ad, -id	-o, -a, -u	-ov, -av, -uv		-er/-or, -ar, -ir
Kur.	-as	-a			-ar
Malt.	-ah	-id, -ad			-ar
Br.	-e, -ik, -ak		-ir, -er, -as, -o		
[L = Language]					

2 Comparative Study

2.1 1sg *-e:(n)

2.1.1 It is represented in all the languages except Brahui. Since Tamil-Malayalam generally preserve the quantity and quality of the vowels of non-initial syllables with regularity, we can reconstruct the vowel of the suffix as *-e: as found in these languages. Kota also agrees with them in having the suffix in almost the same form with a long e:; that language preserves the long vowel in all the personal suffixes. The e: of the 1sg and 1pl (excl) suffixes represents the *ya: of the pronouns 1sg *ya:n and 1pl (excl) *ya:m though we cannot be certain that these pronouns were present in their full form in the verbs at the Proto-Dravidian stage. The vowel, if it is preserved at all, is shortened in the other languages as is the case with any long vowel of a non-initial syllable, e.g. Oka. ba-nd-aḷ 'she came' < *va-nt-a:l̥. Many languages show irregular changes or loss of the vowel due to its position in the non-initial syllable. In Old Telugu past tense forms like ce:sitini 'I did' and ce:sitimi 'we did', traditionally -iti is taken as the past suffix and -ni and -mi as the pronominal suffixes. But we can also take -it as the past suffix and -ini and -imi as the pronominal suffixes. In that case the i of the pronominal suffixes can be taken as the reflex of the e: of *-e:n and *-e:m.

2.1.2 Tu. E < *-en (with the shortening of the original long vowel) is a regular development. The n of the suffix is lost optionally in Kota, Modern Telugu and Kui and obligatorily in Modern Kannaḍa and Koṇḍa. In Modern Telugu the n is not deleted before a clitic that begins with a vowel, e.g. occ-E:-n + a:? 'did I come?', occ-E:-n + o: le:d + o: na:ku gña:pakam le:du 'I don't remember (lit. to₃ me₃ (there) is₅ no₅ remembrance₄) whether (I) came₁ (there) or₂ not₂'. The occurrence of η instead of n in Pe. -aη is due to analogy with the corresponding pronoun a:n(eη) which optionally has eη added at the end; this is a case of the pronominal suffix changing its shape in order to resemble the corresponding pronoun.

2.1.3 In Old Tamil only the suffix with a short vowel occurs after the ca:riyai -an in the past tense forms, e.g. va-nt-an-en 'I came' (the shortening of the long vowel here is due to the increase of syllables in the word that is caused by the ca:riyai). The suffix with the long vowel is

common in the non-past but there are instances for forms with the short vowel also in the old language: *nir-pp-en* (KT 29) 'I will place'. In Old Tamil, *-an* and *-al* also occur after the future suffix: *ari-kuv-an* 'I know', *varu-v-al* 'I will come'.

2.2 1pl (excl) *-e:m

2.2.2 Its reflexes are present in all the languages. As in the case of the 1sg. suffix (§2.1.1), the vowel undergoes shortening and irregular changes in many languages due to its occurrence in the non-initial syllable (only Tamil-Malayalam and Kota retain the long vowel without change). In Tamil *e* > *o*: at a later stage due to partial assimilation with the following *m*. In Tulu *m* > \emptyset / # is regular. The Kannada developments are as follows: *-e:m > (O) -em (shortening of V) > *-emu (addition of enunciative u) > (O/M) -evu (*m* > *v* intervocalically) (all the changes are regular in the language [Subrahmanyam 2008: 225]). In Brahui the 1st pl pronoun *nan* 'we' (< **na:m* 'we (incl)' [DR 3647]) and the corresponding pronominal suffix contain *n* instead of the expected *m* (note that *num* 'you (pl)' < **ni:m* [DR 3688]) retains the *m* in this language). The substitution of *m* by *n* in the pronoun seems to be result of analogy with the oblique base of the 1sg pronoun *kan-* ending in *n*. After the pronoun was affected by this analogical change, the corresponding pronominal suffix also has substituted *n* for the original *m*.

2.2 1pl (incl) *-a:m

2.2.1 For this category, a suffix different from that of the exclusive pl occurs only in the following languages: Kota-Toda, Telugu, Gondi, Konda-Pengo-Manda-Kui-Kuwi, Parji and Kurux-Malto but the exclusive ~ inclusive distinction in the pronouns is present in a greater number of languages. For example, Modern Tamil and Tulu make a distinction between the exclusive and the inclusive pronouns but they have no corresponding distinction in the verb; in Old Tamil also the situation is almost the same but for the remarks of some traditional commentators (§2.2.2). This suggests that the distinction has been created in the verb in later stages in individual languages or smaller groups of languages. This gives us difficulty in reconstructing the suffix for Proto-Dravidian as we shall see below.

2.2.2 In Telugu, the incl form occurs only in the hortative form of the non-past, e.g. (O/M) *me:mu/me:m ce:yu-du-mu/ce:s-ta:-m* 'we (excl)

will do' ~ manamu/manam ce:yu-d-amu/ce:d-d-a:m 'let us (incl) do' (note that manam ce:s-t-a:m is also possible but it means 'we (incl) will do' but it does not have the hortative sense). For the old language we can take -mu as the excl suffix and -amu as the incl suffix but for the modern language the difference between the two lies in the tense marker rather than in the pronominal suffix. Similarly in Parji the incl pl form occurs only in the two paradigms - imperative and potential - and even in these the distinction is not very strictly observed (so Burrow and Bhattacharya 1953: 57). Even though this category is found in some of the languages of all the three subgroups, it is difficult to reconstruct the original form of the suffix. Te. -amu and Kol. -a:m look to PCDr. *-a:m. Given the irregular changes in the vowels of non-initial syllables, we can relate Pa. -umur also to this. Between Ko. -o:m and To. -um, the Kota suffix seems to be older and the Toda one can be directly derived from it since shortening of a long vowel and o: > u in non-initial syllables is a common development in Toda (Emeneau ***). This means that we can reconstruct the suffix as *-o:m for pre-Kota-Toda. We can relate this with PCDr. *-a:m reconstructed on the basis of Telugu, Kolami and Parji if we assume a: > o: as due to the following labial m but this is uncertain. However, there are two other points that are in favour of tracing back *-a:m to Proto-Dravidian. One is the statements of the commentators of *Tolka:ppiyam* (*Collatika:ram, su:tra* 202) --- Ilampu:raṇar, Ce:nna:varaiyar and Naccina:rkiniyar --- that the suffixes -a:m and -am are used inclusively and -e:m and -em exclusively in Old Tamil (Subrahmanya Sastri 1945: 168). This exactly corresponds to the usage of -amu as the inclusive suffix in Old Telugu. The second one is the close resemblance between this suffix and the inclusive pronoun *na:m of Proto-Dravidian.

2.2.3 Gondī and Konda agree with each other in having the suffix as *-a:t̪. It resembles the end part of the inclusive plural pronouns in those languages: Go. (A) mara:t̪, (M) ma:t̪, Konda ma:t̪(u). While Go. (A) mara:t̪ is analogical to mira:t̪ (< *mi:r-a:t̪) of that language, the Maria and the Konda forms are new creations involving the addition of the plural suffix -t̪ to the oblique base ma:- (< PDr. *yam-) of the 1st person exclusive plural pronoun. It is obvious that the suffix has been created after the creation of the pronouns themselves in these languages.

2.2.4 In Parji, the inclusive plural suffix is -ar in the imperative and -umur in the potential. The corresponding pronoun in that language is

amor which seems to be created by adding the 2pl suffix -or to 1pl (excl) pronoun a:m (a: > a due to the additional material added) (Subrahmanyam 1968***: 207). The suffix also similarly consists of the 1pl exclusive -a/-um followed by 2pl -/-ur.

2.2.5 Pengo-Manda-Kui-Kuwi contain suffixes that seem to go back to *-att. The corresponding pronouns in these languages --- ***Pe. Manda Kui a:ju, Kuwi ma:rro:/ma:ro --- can be traced back to *a:t. There is some resemblance between the pronoun and the suffix but they are not relatable to the forms in the sister languages.

2.2.6 The Kurux-Malto suffixes are reconstructable as *-(V)t. It has no similarity with the inclusive pronoun na:m and is not relatable to the forms in the sister languages.

2.3 2sg *-a:y, *-i:

2.3.1 The reflexes of this suffix, which has to be reconstructed in two forms, occur in all the languages except Telugu, Gadaba-Parji and Brahui. Gadaba-Parji together stand apart from the other languages in having t and ʈ respectively in this suffix; the origin of these is not clear at present.

2.3.2 In Old Tamil, -i occurs after the past -t (∞ -tt) as well as the future -t (∞ -tt), e.g. cey-t-i 'you (sg) did', ali-tt-i 'you (sg) will pity'; here *i: > i because a long vowel does not occur in the final position of a polysyllabic word. To. -ty in past II (e.g. pi:č [< pi:šty] 'you (sg) went') and voluntative negative resulted from the fusion of *-tt (past/non-past) + *-i pronominal suffix). -a:y and its variant -ai with a short a, which occurs normally when there is an increase in the number of syllables because of the ca:riyai -an or a tense suffix like past -in and future -kuv with a vowel, are more common, e.g. en-p-a:y 'you (sg) will say', ari-nt-an-ai 'you (sg) new', cel-kuv-ai 'you (sg) will go', ni:t-in-ai 'you (sg) extended' (after past -in, -a:y and -ai are in free variation) (Agesthalingom 1979: 188-92). -a:y also has the variant -o:y in the finite verbs and appellative nouns of Old Tamil, e.g. ven-r-o:y 'you (sg) won', ariy-a:t-o:y 'you (sg) did not know', cey-v-o:y 'you (sg) who will do'. Of the four suffixes only -a:y survived into Modern Tamil; it is reduced to -e in Spoken Tamil, e.g. va-nt-e 'you (sg) came'. OKa. -ay (also written -ai) with the regular change V: > V in a non-initial syllable is directly

relatable to Ta. -a:y; -ay further changed to -e in Old Kannada itself (Ramachandra Rao 1972: 132), e.g. *maḍi-v-ay* 'you (sg) will die', *ba-nd-ai* 'you (sg) came', *ir-d-e* 'you (sg) were'. Pe. -ay and Kur. (m) -ay with similar shortening of the vowel along with the evidence from Old Tamil and Kannada allow us to reconstruct *-a:y to Proto-Dravidian.

2.3.3 In Old Telugu, the suffix -vu, -vi is optional in the past and the future tenses (*cepp-iti(-vi)* 'you (sg) told', *ceppu-du(-vu)* 'you (sg) will tell') but it is obligatory in the negative (e.g. *cepp-a-vu* 'you (sg) will not tell'). It is obligatory in all the paradigms in the modern language, e.g. *cepp-E:-vu* 'you (sg) told'). In this language, the original 2sg pronoun *ni: 'you (sg)' (DR 3684) became ni:vu by the addition of vu since monosyllabic words ending in a vowel are not tolerated in it (similarly *a: > a:vu 'cow' (DR 334), *pu: > pu:vu 'flower' (DR 4345)). The pronominal suffix has been changed later according to the new form of the pronoun. The optional nature of the suffix in the past and the future tenses of Old Telugu indicates that -vu was not originally part of the pronoun or the corresponding suffix. Kolami-Naiki ni:v is a borrowing from Telugu though its oblique base in- is not a borrowing. In Kolami also the pronominal suffix shows v as in Telugu under the influence of the pronoun. It is probable that Naiki has lost the v at a later stage as does the Adilabad dialect of Kolami.

2.3.4 Evidence for reconstructing *-i: (corresponding to the pronoun *ni:(n)) to Proto-Dravidian is found in Old Tamil (-i), Kodagu (-iya), Kota (-i: [length in this seems to be a retention from Proto-Dravidian]), Toda -y (< *-i), Gondi (-i:, length in this is a later development), Konda (-i), Manda-Kuwi (-i) and Kurux-Malto (feminine -i). The original long vowel has been shortened in Old Tamil (and others) because long vowels except a: in the final position of a polysyllabic word are absent in that language (as in other literary languages); even the a: in words like *kaṇa:* 'dream' (DR 1407) resulted from contraction of original *acu* > *avu* (*kaṇacu* > *kaṇavu* > *kaṇa:*).

2.3.5 Kurux-Malto innovated by creating two different forms in this category, one for use while addressing a male and the other while addressing a female, e.g. Kur. (m) *ba:-ck-ay* 'you (sg. m) said', (f) *ba:-ck-i* 'you (sg. f) said': Malt. (m) *amb-t-e* 'you (sg m) left', (f) *amb-t-i* 'you (sg f) left'. It is probable that semantic specialization of the two

original suffixes took place here since Kur. -ay and Malt. -e are from *-a:y and Kur.-Malt. -i is from *-i:.

2.4 2pl *-i:m, *-i:r

2.4.1 The reflexes of *-i:r, which corresponds to the pronoun *ni:r, occur most regularly in all the languages except Gondi. Apart from *ni:r, Proto-Dravidian had another 2pl pronoun *ni:m which seems to be the earlier one of the two; note that the oblique bases in all the languages are traceable to *nim-. *ni:r is created by analogically adding the 3rd person human plural suffix -r (found in 3rd person pronouns as well as nouns) to the 2nd person base *ni:- but it undoubtedly goes back to Proto-Dravidian (DR 3688; Subrahmanyam 1967-68, §§22, 26, 2006a; 188 [especially note 22]).⁸ As *ni:m is older than *ni:r, the suffix *-i:m must be older than *-i:r but the reflexes of the former are found only in Spoken Tamil (e.g. va-nt-iṇ-ke 'you (sg) came' [< *va-nt-i:m-kal] corresponding to Standard Ta. va-nt-i:r-kal) and Kota; however, they are more common in the imperative. It is also possible that in these two languages *-i:r is replaced by -i:m because of the corresponding pronoun with m, i.e., Ta. ni:ṇ-kal and Kota ni:m.

2.4.2 The sibilant in the Toda suffix -š, -tš is a regular reflex for the r in PDr. *-i:r (Emeneau 1957a: 59, Subrahmanyam 2008a: 207-8). The additional t of -tš found in present-future (e.g. po-d-tš 'you (pl) (will) come') must be the non-past *-t(t) suffix in origin (cf. §2.3.2).

2.4.3 The Gondi suffix -i:t (e.g. va-t-i:t 'you (pl) came') is an innovation in that language on the basis of its 2pl pronoun nimme:t/imma:t which

8. Though the pronoun *ni:r is not preserved in North Dravidian, the occurrence of *r in the 2pl pronominal suffixes in this subgroup as well as in the other two establishes beyond doubt that the pronoun *ni:r also along with *ni:m goes back to Proto-Dravidian (Subrahmanyam 1971a: 412, n. 3). It is obvious that *-i:r could not have been created in Proto-Dravidian if its source pronoun *ni:r were not there at that stage. What must have happened here is that both the pronouns *ni:r and the pronominal suffix *-i:r created on the basis of it were there in Proto-Dravidian but North Dravidian retained only the suffix but not the pronoun that was the source for it. Therefore one cannot agree with Krishnamurti's (1968b: 204-5, 2003: 251) view that *ni:r does not belong to the Proto-Dravidian stage. In the earlier work, he took the similarity between South Dravidian and Telugu-Kuwi in having the reflexes of *ni:r as an areal feature and in the later one he maintains that *ni:r goes back only to Proto-South Dravidian but not to Proto-Dravidian (but later in the second work cited above (2003: 310) he contradicts himself and says that 'the replacement of *ni:m by *ni:r was a shared innovation at the Proto-Dravidian stage ...').

is made by adding a new plural suffix *-e:t/-a:t* to the original **ni:m* ‘you (pl)’ (DR 3688). The Koya dialect of Gondī retains *-i:ri* (< PDr. **-i:r*).

2.4.4 The distinction between the suffixes 2pl **-i:r* and 3pl **-a:r* is signalled by the presence of different vowels in most of the languages but it is blurred in some languages like Telugu, Kui and Kuwi for reasons like the loss of the vowel after the vowel of the tense marker, cf. OTe. *mi:ru/va:ru ce:yu-du-ru* ‘you (pl)/they (h) will do’, MTe. *mi:ru/va:l̩lu occ-E:-ru* ‘you (pl)/they (h) came’. But Old Telugu maintains the distinction in the past paradigm by using different allomorphs of the tense marker, e.g. *mi:ru vacc-iti-ri* ‘you (pl) came’ ~ *va:ru vacc-i-ri* ‘they (h) came’.

2.5 3msg **-a:ntnt(u)*

2.5.1 As has been suggested earlier (§0.4), we can conclude that there were no pronominal suffixes in the 3rd person (as in the case of *-k/gum* forms of Old Kannada) at the earliest stage of Proto-Dravidian. This stage must have been followed by a stage at which forms with pronominal suffix first developed for hpl (as in Old Tamil and Old Telugu) and later for msg, nmsg and npl. Burrow and Bhattacharya (1970: 35-36) consider **avant(u)* (nominative the oblique base being **avan-*) preserved in Central Dravidian as the 3msg pronoun of Proto-Dravidian and explain that its oblique base **avan-* has been extended as the nominative form in South Dravidian. In a similar way, the reflexes of the pronominal suffix **-a:nt(u)* are preserved in Central Dravidian but in South Dravidian it is replaced by **-a:n̩* after the change in the shape of the corresponding pronoun. In Gondī *-o:l/-o:r*, the second one as well as the corresponding pronoun (v)*o:r* show **nt(u) > r*; in the dialects that have *o:l* as the pronoun (probably with *r > l*) the suffix also follows suit in showing *l*. In the Konda suffix *-an[r]*, the *r* appears only before a vowel of the clitic but not in the final position: *va:nru ki-t-an* ‘he did’ but *ki-t-anr + a:* ‘did he do?’ (Krishnamurti 2003: 212). Kur. *-as* and Malt. *-ah* resemble the corresponding pronouns, Kur. *a:s* and Malt. *a:h*; it is not clear whether Kur.-Malt. **a:s* is from **avant(u)* since there are no other instances for **nt > Kur.-Malt. *s*.

2.6 3fsg **-a:l̩*

2.6.1 The feminine category in the pronouns and the finite verbs is an innovation in Proto-South Dravidian. The suffix **-a:l̩* (with the variant

*-aḷ in the pronouns *avaḷ ‘she (distant)’ and *ivaḷ ‘she (proximate)’; in the finite verbs of Old Tamil the two are in free variation with some restrictions). The suffix is created from the independent word *a:ḷ which means ‘woman’ in compound words like *ill-a:ḷ ‘woman of the house; wife’ (DR 399; Krishnamurti 1961: 257).

2.7 3hpl *-a:r

2.7.1 As has been suggested earlier (§0.4), we can conclude that there were no pronominal suffixes in the 3rd person (as in the case of -k/gum forms of Old Kannada) at the earliest stage of Proto-Dravidian and that this stage must have been followed by a stage at which forms with pronominal suffix first developed for hpl (as in Old Tamil and Old Telugu) and later for msg, nmsg and npl. The reflexes of this suffix occur most regularly in all the languages including Brahui in which the suffix is extended to npl also due to loss of gender distinction.

2.7.2 In the Central Dravidian languages other than Telugu, the reflexes of this suffix as well as those of the corresponding pronoun *avar mean masculine plural as well as human (i.e. masculine + feminine) plural. The difference in meaning between South Dravidian and Telugu on the one hand and this subgroup on the other is that while the forms in the former can mean exclusively feminine plural also those in the latter do not have that meaning. That is, while, for example, Ta. va-nt-a:r can mean ‘men/men and women/women came’, Go. va:-t-e:r means only ‘men/men and women’ but not ‘women (alone) came’; for this va:-t-a:ŋ ‘women/non-humans came’ should be used. The fact that the reflexes of *avar ‘those people’ (and those of *ivar ‘these people’) and the suffix *-a:r mean human plural also in addition to masculine plural in Central Dravidian (- Telugu) was brought to light by Subrahmanyam (1971: 417-19) with textual examples from Gondi, Parji and Kolami (examples from Konda and Pengo are added here).

(Gondi [from my field notes])

ma:ta:ri: ma:tra:l na:go:ba:l si:ta: ad so:ne: paysa:ŋ tinje:r tamva:
jiŋga:ni: ki:se:r **ma-tt-e:r**

‘(the) old₁ woman₁ (and) (the) old₂ man₂ were₁₂ continuing
(lit., doing₁₁) their₉ family₁₀ life₁₀ spending (lit., eating₈) (the)
gold₆ (and) money₇ Na:go:ba:13 gave₄’

(Konda [Krishnamurti 2001: 143])

va:ru **ma-R-ar**

‘they₁ (brothers, sisters-in-law) stayed₂’

(Pengo [Burrow and Bhattacharya 1970: 185])

burhi buḍiya **ma-c-ar**

‘(there) were₃ (an) old₁ man₁ (and) (an) old₂ woman₂’

(Parji [Burrow and Bhattacharya 1953: 119])

ku:yed eroḍ **o:r eke ver-r-ar** ge

‘when₁₋₂ (he) called₁₋₂ they₃ (i.e., his brothers and sisters) came₅’

(Kolami [Emeneau 1955: 166])

ini iddarna **maṅk-t-er**

‘and₁ both₂ (of them) (i.e., the washerman and his wife) slept₃’

2.7.3 Bloch (1954: 7), who was not aware of the fact that what are generally known as the masculine plural forms of the Central Dravidian languages (- Telugu) denote also a mixed group of man/men and woman/women, proposed that the situation in those languages (for example, the reflexes of *avar mean only ‘those men’ but not ‘those people’ as in South Dravidian, Telugu and Kurux-Malto) represents the Proto-Dravidian situation and explained that the forms underwent the semantic change ‘those men’ > ‘those people’ in South Dravidian, Telugu and Kurux-Malto in order to refer to mixed groups of men and women.⁹ The following points may be noted in this connection:

(i) Once we realize that the forms mean human plural in Central Dravidian (- Telugu) as in South Dravidian, Telugu and Kurux-Malto, we can reconstruct with confidence the meaning ‘human plural’ as it is present in all the subgroups.

9. Krishnamurti (1961: 256, 1975 [2001: 133-53], 2003: 205-17) followed Bloch with the additional argument (2001: 142) that since *avar is the plural of *avant(u) ‘that man’ it should mean only ‘those men’ but should not have any additional meaning. This argument is hollow as can be seen from the situation in Telugu where va:[ṇ]ḍu means ‘that man’ and va:ru means ‘those men/women/men(/man) and women(/woman)’. However, in his recent work (2003: 211), he, while maintaining his earlier position in general, accepts the possibility of the semantic extension (‘men’ > ‘men and women’) taking place within (the later stages of) Proto-Dravidian itself.

(ii) Since the speakers of Proto-Dravidian also, like speakers of any natural language, must have had a need to refer to mixed groups of men and women, the hypothesis that the meaning 'those people' is a later development is questionable.

(iii) We can easily give the answers for the questions why the reflexes of *avar (and the other related forms) lost the meaning 'those women' and why that was transferred to the reflexes of *av(ay) 'those (nh)' in Central Dravidian (- Telugu). The reason for this change is analogy with the singular in which the contrast is between masculine and non-masculine (Subrahmanyam 1976a).

2.7.4 In Old Tamil -a is found to occur as the 3hpl suffix in some cases instead of the more common ones with r; it occurs only after the future -p (∞ -pp), e.g. en-p-a 'they (h) say', peru-p-a 'they (h) will get', a:ku-p-a 'they (h) will become'.¹⁰ Forms with the same structure function also as participial nouns with the meaning 'non-human'; for example, en-p-a also means 'those (n) that are called' (Agesthalingom 1979: 213). The suffix -a in fact belongs to 3npl. Like the -um forms, these forms with no distinction between human and non-human probably are indicative of an earlier stage with no number and gender distinction in the 3rd person.

2.7.4 In Spoken Tamil, the human plural suffix is -a:ŋ-ka[l], which is closely related to the corresponding distant and proximate pronouns avaŋ-ka[l] and ivaŋ-ka[l]. The nasal in them cannot be explained on phonological grounds since the older forms are -a:r-kal, avar-kal and ivar-kal respectively with the expected r instead of ŋ. The pronouns are remade on the analogy of the corresponding 1st (exclusive) and 2nd person pronouns na:ŋ-ka[l] (< na:ŋ-kal < *na:m-kal) and ni:ŋ-ke[l] (< ni:ŋ-kal < *ni:m-kal) in which the nasal is expected. The pronominal suffix changed its shape according to the pronouns.

2.8 3nmsg *-at(u)

2.8.1 As has been suggested earlier (§0.4), we can conclude that there were no pronominal suffixes in the 3rd person (as in the case of -k/gum

10. Cf. kuzal initu ya:z init(u) enpa tam makkal
mazalaiccorke:la:tavar (TK 66)

'those₉ that₉ dog not₉ hear₉ their₆ children's₇ babble₈ say₅ (that) flute₁ (is) sweet₂ (and) lute₃ (is) sweet₄'

forms of Old Kannaḍa) at the earliest stage of Proto-Dravidian and that this stage must have been followed by a stage at which forms with pronominal suffix first developed for hpl (as in Old Tamil and Old Telugu) and later for msg, nmsg and npl. *-at(u) is identical with the distant non-masculine pronoun *-at(u). Its reflexes occur in all the South Dravidian languages, Telugu (e.g. negative: adi tin-a-du ‘she/it will not tell’), Konda, Pengo-Manda, Kolami-Naiki, Gadaba and Kurux-Malto. [The reflexes of the variant *-tt(u) are rare in Tamil (e.g. a:yirru (< *a:k-in-ttu) ‘it became, completed’, taṇkirru (< *taṇk-in-ttu) ‘it stayed’) but they are common in Kannaḍa (e.g. a:yitu ‘it became, completed’, ho:yitu ‘it went’). Its reflex occurs in Toda also (§1.9). The t of Konda-Pengo -at also has to be traced to this variant. In the rest of the languages the suffix is some vowel, most commonly e or -a, e.g. Go. ad va:-t-a: ‘she/it came’.]

2.9 3npl *-av

2.9.1 As has been suggested earlier (§0.9), we can conclude that there were no pronominal suffixes in the 3rd person (as in the case of -k/gum forms of Old Kannaḍa) at the earliest stage of Proto-Dravidian and that this stage must have been followed by a stage at which forms with pronominal suffix first developed for hpl (as in Old Tamil and Old Telugu) and later for msg, nmsg and npl. *-av is identical with the *av variant of the distant neuter pronoun *-av(ay).¹¹ OTa., OMa., Tulu -a is derived from *-av by the loss of v in the final position. According to *Tolka:ppiyam* (su:tra 81 --- vakarakkilavi na:n mozi i:r_uratu) there are only four words in Tamil ending in v; the commentators gave the words as av, iv, uv and tev ‘enmity’ (the first three are 3npl pronouns, distant, proximate and intermediary respectively). Many languages (Kannaḍa, Telugu, Kolami-Parji) retained the suffix with v (note that Naiki (Ch.) -e/-a < *-ev/-av since this language and the Adilabad dialect of Kolami show *v > Ø in the final position, e.g. Kol. (W) ada:v ‘they (n)’: Kol. (A) ada:, Nk. (Ch) anda). Kui-Kuwi u, o < *-av with v causing the rounding of the resultant vowel.

2.9.2 In Old Tamil, the suffix may or may not be preceded by the ca:riyai -a_n (additional past suffix in origin): te:y-nt-a ‘they (n) were

11. This pronoun has to be reconstructed with two forms: *av and *avay. Ta. avai and Te. avi yield *avay while Old Ta. av, Ka. avu, Go. av, etc. look to *av.

worn out' without -an but iza-nt-an-a 'they (n) lost' with it. It is always preceded by the ca:riyai in later Tamil.

2.9.3 In Gondi (-a:ŋ) and Pengo (-iŋ) the original suffix has been replaced by a new one which resembles the plural suffix of vowel-ending non-human nouns of Gondi-Kuwi, e.g. Go. ko:nda:-ŋ 'oxen', paddi:-ŋ 'pigs', Pe. huka-ŋ 'stars' (Bloch 1954: 51). This innovation in these two languages illustrates how pronominal suffixes developed in Dravidian in course of time on the basis of the pronouns and nouns that can occupy the subject position in the sentence.

2.9.4 Another unique innovation in Pengo is the creation of separate pronouns for feminine plural (with the feminine suffix -ek added to the original neuter plural pronouns: av-ek/ev-ek 'those women', iv-ek 'these women') and the corresponding finite verb forms for feminine plural with the suffix -ik (e.g., hur-t-ik 'the women saw'; contrast: hur-t-iŋ 'the non-humans saw').¹² In the other Central Dravidian languages (except Telugu) the feminine plural is the same as the non-human plural. Though the feminine plural category in Pengo is an innovation, the suffix -ek, -ik is not new. Pengo used the suffix that occurs as the plural suffix in feminine nouns in Gondi-Kuwi to create the new categories, e.g. Go. se:la:-sk 'younger sisters' (sg. se:la:r), a:ti:-k 'aunts', Pe. koyi-k 'girls', dokri-k 'wives'.

2.9.5 Brahui, which has lost the gender distinction, generalized -ir, -e:r, which are from the original human plural *-a:r, for the 3rd person plural category. It is not clear whether the other suffix -o is from *-av.

2.9.6 In Spoken Tamil, Kota and Kurux-Malto there is no separate form for non-human plural; the non-human singular form in the first two languages and the non-masculine singular form in the other two is used to express the sense of non-human plural, e.g. Sp. Ta. maram irukku 'tree(s)₁ is/are there₂'. This is in accord with the fact that originally the non-human plural category was an optional one. Spoken Tamil, Kota and Malto do not have non-human plural pronoun also; the non-human

12. Pengo has separate feminine singular pronouns a(n)del/e(n)del 'that woman', idel 'this woman' but this is not a unique feature of Pengo since South Dravidian also has similar forms. Unlike the situation in South Dravidian, these Pengo singular pronouns do not have corresponding verb forms as in South Dravidian but take the verb forms that correspond to non-human singular pronouns: a(n)del/adi hur-t-at 'she/it saw'.

(non-masculine in Malto) singular form functions additionally as the plural form in these languages.

BIBLIOGRAPHY

- Agesthialingom, S. 1979. *A Grammar of Old Tamil with Special Reference to Patirruppattu (Phonology and Verb Morphology)*. Annamalainagar: Annamalai University.
- Burrow, T. & Bhattacharya, S. 1953. *The Parji Language*. Hertford.
- . 1970. *The Pengo Language*. Oxford.
- Caldwell, Robert. 1956 [1856 1st edn., 1875 2nd edn., 1913 3rd edn. revised and edited by J.L. Wyatt & T. Ramakrishna Pillai]. *A Comparative Grammar of the Dravidian or South-Indian Family of Languages*. Madras: University of Madras.
- Emeneau, M.B. 1955. *Kolami, a Dravidian language*. Berkeley: University of California Press.
- Krishnamurti, Bh. 1961. *Telugu Verbal Bases: a Comparative and Descriptive Study*. Berkeley & Los Angeles: University of California Press. (Reprint: 1972, Delhi: Motilal Banarsidass).
- . 2001. *Comparative Dravidian Linguistics (Current Perspectives)*. New York: Oxford University Press.
- . 2003. *The Dravidian Languages*. Cambridge: Cambridge University Press.
- Rajam, V.S. 1992. *A Reference Grammar of Classical Tamil Poetry*. Philadelphia: American Philosophical Society.
- Ramachandra Rao, B. 1972. *A Descriptive Grammar of Pampa Bha:rata*. Mysore: University of Mysore.
- Ramaswami Aiyar, L.V. 1936. *The Evolution of Malayalam Morphology*. Ernakulam.
- . 1938. "The morphology of the Old Tamil verb". *Anthropos* 33: 747-81.
- Subrahmanyam, P.S. 1971. *Dravidian Verb Morphology: a Comparative Study*. Annamalainagar: Annamalai University.
- . 2008. *Dravidian Comparative Grammar - I*. Mysore: Central Institute of Indian Languages.
- . f. *Dravidian Comparative Grammar - II*.

REFERENCE AND MEANING OF DRAVIDIAN DEMONSTRATIVES

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1. Introduction

While philosophy is the study of the fundamental nature of knowledge, reality and existence, the philosophy of language is concerned with the relationship between these and language (Carr, 1994). The analysis of such features of language as reference, meaning, truth, verification, speech acts and logical necessity has been the concern of philosophy of language (Searle, 1969). A preliminary exploration into the philosophical problems of meaning and reference as reflected in the lexical and grammatical structure of demonstrative pronouns in (selected) Dravidian languages is the goal of the present paper. Word in natural language consists of form, meaning and reference. The relationship between the members of this triad has attracted the attention of linguists as well as philosophers (Lyons, 1968 and 1995; Lamarque, 1994).

Reference is the relationship that holds between linguistic expressions and what they stand for in the real world (Strawson, 1971). It is a context-dependent aspect of utterance - meaning and is intrinsically connected with existence. Referring expressions in natural languages include names, noun phrases (or definite descriptions) and pronouns. Pronouns can, in turn, be classified into personal pronouns and demonstratives. In the literature on philosophy of language, the demonstratives are variously labelled as indexicals, deictic expressions, egocentric particulars or token-reflexive expressions (Lezzenberg, 1997).

2. Deictic expressions

"By deixis is meant the location and identification of persons, objects, events, processes and activities being talked about or referred to, in relation to the spatiotemporal context created and sustained by the act of utterance and the participants in it, typically, of a single speaker and at least one addressee" (Lyons 1977: 637). The speech act participants of speaker and hearer play a primary role in the cognition, production and comprehension of natural language utterances.

2.1 Deictic context

- (i) Egocentricity and subjectivity of deictic centre would be around the speaker, i.e. the central person (deixis) is the speaker. The divisions into speaker, addressee and referent have their reflexes in grammar as first, second and third person pronouns respectively. The output hierarchy in conjunction (of these pronouns) indicates the dominance of speaker/addressee over the other pronouns i.e. the hierarchy of I person II person III person, is well attested in natural languages. It is a universal across the world's languages and an obvious evidence for the centrality of participant roles in a speech event (Lyons, 1975 and Ramakrishna Reddy, 2006).
- (ii) The central place in a speech event is the speaker's location at the time of utterance (Ramakrishna Reddy, 1990 and 1992).
- (iii) Central time is the one at which the speaker produces the utterance (Ramakrishna Reddy, 1987).
- (iv) Discourse centre is the point with which the speaker is currently identifying himself in the production of utterances (Lyons, 1977).
- (v) Social deixis springs from the speaker's social status, rank and role in relation to that of addressee/referent (Nagamma Reddy & Ramakrishna Reddy, 2003).

2.2 Deictic field

The pragmatico-semantics is anchored on the relevance of speech act participants (situation) for the interpretation of certain linguistic structures, i.e. the role of speaker - addressee (I and II persons), place of their location (here) and the time of speech event (now). Concrete physical space as well as abstract metaphorical events measured and identified with the aid of person, space and time deixes

are noticed and explained by linguists and philosophers (Fillmore 1977, Lyons 1997, Stalnaker 1972).

Persons, objects, places and events are identified and named. The linguistic reflexes are the nouns, noun phrases and their substitutes (i.e. pronouns, adverbs etc.). Identification involves two major steps: (i) content-description of the referent consisting of such features as number, gender, animacy, class, status etc., and (ii) pointing its location in comparison with the deictic centre (person, place and time). The latter is the basis for deictic words and the former for the pragmatico-semantic information found in certain pronouns. Both the kinds (of information) are lexicalized in the Dravidian demonstrative pronouns (e.g. Tamil *ivan* 'this male person', *avan* 'that male person') and only the former information is grammaticalised through verbal inflexions (i.e. agreement features, cf. Ramakrishna Reddy 1991, 1992, 2003).

2.3 Deictic systems

Deixis is one of the referential categories that indicates the relevance of extra-linguistic context of utterance in determining the proper interpretation of linguistic elements. The extra-linguistic context of situation may include such factors as the participants of a speech event (the speaker and addressee), and the spatio-temporal orientation of the speech act. Certain areas of linguistic structures, accordingly, depend on these pragmatic elements of language use for their accurate semantic reading(s). Deictic systems of natural languages are, thus studied under the divisions of (i) person deixis (ii) place deixis (iii) time deixis (iv) discourse deixis, and (v) social deixis (Ramakrishna Reddy, 1990).

Person deixis is concerned with the interlocutors of speaker and addressee of a speech act and it is typically manifested in the first and second person pronouns, and the related lexical and grammatical structures. Spatial deixis deals with the location of an object (or person) relative to the location of the speaker and/or the addressee (i.e. location relative to that of the speech event). The combination of person and place deictics gives rise to the spatial division as lexicalized in such linguistic elements as demonstrative adjectives, locative adverbs, demonstrative pronouns and others (Ramakrishna Reddy, 2009).

Temporal deixis refers to the location of an event in time relative to the time of speaking and it is represented by tense, time adverbials and other temporal expressions. Discourse or textual deixis deals with items that refer to a part of the ongoing conversation (or a written text) itself, and the notions of given and new; topic and comment seem to have a crucial role here. Socio-cultural dimensions of social rank, age, and social status of the addressee or referent in relation to the speaker, constitute as the bases of social deictics, which can be gathered from the use of honorifics, vocatives, polite-pronouns, greetings and extended use of kin-terms. Any lexical choice from a given set of synonyms, automatically signals the social proximity or distance between the speaker and addressee or the referent.

The evolution or emergence of deictic notions is based on the location of the speaker in a given speech act situation. Thus the speaker and his location (physical, temporal, real or imaginary) constitute the deictic centre of any context of utterance. Of the five deictic systems introduced above, the nature and representation of the spatial deixis as in Dravidian demonstratives is explored briefly in the following paragraphs.

Lexicalization and grammaticalization of pragmatic notions are best represented through the deictic expressions as manifested in lexical semantics, syntax and morphology. The interrelationship of these levels of linguistic analysis is further confirmed and reinforced by the spread of deixis across linguistic structures. Secondly within linguistics itself, deictic system overlaps the branches of psycholinguistics, sociolinguistics, anthropological linguistics, historical linguistics, comparative typology and areal linguistics, deserving analysis from the theoretical viewpoints of each. Thirdly, the phenomenon of deixis is an interdisciplinary subject drawing the attention/interest of philosophers, psychologists, social anthropologists, sociologists and scientists concerned with information technology, machine translation and artificial intelligence (cf. Diesel 1999; Segerdahl, 1996 Levinson, 1983 and Lyons 1995).

3. Lexicalisation of place deixis

The systems of demonstratives exhibit a rich variety of distinctions (Fillmore, 1982; Anderson and Keenan, 1985): The two-term

systems of proximate versus distant wherein the entity close to/at the speaker and away from him/her, respectively are more frequent as in Telugu, Gondi, Modern Tamil, Modern Kannada, Malto, Kolami, Malayalam, Parji, Konda, Gadaba, Tulu, Toda, Kota and Kodagu. There are also languages with a three-term system of proximal, medial and distal, i.e. a two-way division of the non-proximate. The distinction between the two non-proximates emerges on the criterion of visibility. The Kondh Dravidian languages of Kui, Kuvi, Pengo, Indi-Awe and Manda reflect this distinction transparently e.g. *i:* 'proximate' *u:* 'distal-visible' and *e:* 'distal non-visible'. A three-way division is also reported for Old Tamil, Middle Kannada and Jaffna Tamil. The Laxmipur dialect of Kuvi is said to have a four-way division though the pragmatic distinction between the last two is yet to be established (Israel, 1979:182). A five-term division is found in Kharia, a Munda language (Ramakrishna Reddy, 1990).

Deictic elements, just like nouns, are basically referring expressions, but the similarity ends there. Nouns identify the entities by naming them in an arbitrary fashion in a conventional way, whereas deictics (at least those of our concern) do this by pointing gesturally the location of the entities relative to location of the speaker, and then describing them (the entities) in terms of some qualitative or semantic information pertaining to the relevant entity under focus. There are several areas of lexical structure that recognise and represent the deictic distinctions as an integral part of their make-up (Ramakrishna Reddy, 2009).

3.1 Demonstrative adjectives

While explicating the deictic systems in the preceding section, the nature and division of the demonstrative bases were provided in some detail. It suffices here to observe that these deictic elements act as attributes and appear before head nouns within a noun phrase, as can be seen from the following examples: (Note that *D* stands for distance from deictic centre: *D1* proximate, *D2* Remote visible, *D3* Remote non-visible and *D4* far removed non-visible Remote).

(1) Telugu

D1	<i>i: abba:yi</i>	'this boy'
	<i>i: abba:yilu</i>	'these boys'

D2	<i>a: ba:wi</i>	'that well'
	<i>a: ba:wulu</i>	'those wells'

(2) Manda

D1	<i>i: marke</i>	'these trees'
D2	<i>u: putke</i>	'those birds'
D3	<i>e: na:yu</i>	'that village'

(3) Kuvi

D1	<i>i: do:la</i>	'this boy'
D2	<i>e: do:la</i>	'that boy'
D3	<i>hu: do:la</i>	'that boy'
D4	<i>he: do:la</i>	'that boy'

It may be pointed out here that none of the languages of our enquiry exhibits any concord between the deictic attribute and the head of the Noun Phrase. Attribute does not mark even the number agreement as noticed in English (this boy: these boys) and Hindi (*yah larka*;, *ye larke*)

3.2 Demonstrative adverbs

The recognition and division of the degrees of distance is transparently reflected in the locative adverbs as they indicate the spatial distinctions relative to the location of the speaker in a speech event. Here the deictic bases (enumerated above) combine with a semantic element denoting the sense of 'place' and the product of this combination is a demonstrative adverb. The locative adverbs with different deictic systems can be represented as in (4).

(4)	Kuvi	Manda	Telugu
D1	<i>imba?ā</i>	<i>i:ba</i>	<i>ikkada</i>
D2	<i>emba?ā</i>	<i>u:ba</i>	<i>akkada</i>
D3	<i>humba?ā</i>	<i>e:ba</i>	
D4	<i>hemba?ā</i>		

In these examples each item clearly denotes the division of space with the deictic element (i:, u:, e:) and the descriptive label for place

(*mba?ā* in Kuvi, *ba* in Manda and *kada* in Telugu), the order being deictic element + descriptive element.

A similar strategy of encapsulating different types of information into a lexical item is adopted in the formation of other adverbs as well, as illustrated from Telugu in (5).

(5) Description	Location	
	D1	D2
Time	<i>ippuḍu</i>	<i>appuḍu</i>
Direction	<i>itu</i>	<i>atu</i>
Manner	<i>itla/ila:</i>	<i>atla/ala:</i>
Side	<i>iwatala</i>	<i>awatala</i>
Quantity		
(-countable)	<i>inta</i>	<i>anta</i>
(+ countable)	<i>inni</i>	<i>anni</i>
Human (plural)	<i>indaru</i>	<i>andaru</i>
Reason	<i>induku</i>	<i>anduku</i>

The items listed as adverbs are of heterogeneous nature in that their reference ranges from concrete (physical) features like direction to abstract qualities like manner or reason. But the incorporation of spatial demonstrative into their lexical formation is the point under focus.

3.3 Demonstrative pronouns

The pronominal system in Dravidian languages can fruitfully be divided into participant and non-participant pronouns, the former standing for the first and second persons and the latter for the rest. The non-participant pronouns are conventionally termed as third person pronouns. But Dravidian does not have any unmarked, typical third person pronoun equivalent to the English *he, she, it* or *they*. What we do come across in these languages (under the so-called third person pronouns) are the demonstrative pronouns that encapsulate several semantic features into their lexical composition. The semantico-pragmatic information that is lexicalised in the demonstrative pronouns is anchored on the following two parameters of:

- (6) (i) Referential or Locational information or Distance indicator
- (ii) Qualitative or Descriptive or Grammatical information

The system and distinctions involved in the parameter of locational or deictic information are the same as indicated above. There is hardly any variation within a given language regarding the function and use of a recognised deictic feature, whereas variation in descriptive or semantic information across the languages is quite common.

There is a rich variety of descriptive information that is encoded into the lexical structure of demonstrative pronouns under study. The recognizable salient semantico-syntactic features include number, gender, animacy and human among others. Languages do differ from each other in the selection of a particular list of features for lexicalization, but there seems to be an implicational hierarchy in the incorporation, for example if a language encapsulates gender/animacy in its structure, we can predict that it might have, by implication, incorporated the number as well. The process of lexicalization involves the selection of particular feature(s) from each of the two parameters and their combination. In other words, the demonstrative pronouns, each one of them encapsulates the deictic as well as the descriptive information into its lexical structure, as represented in the following paradigm.

(7) Manda demonstrative pronouns

Gender Number Proximal Distal Distal

		visible non-visible		
Masculine	Sg.	<i>ivan</i>	<i>uvan</i>	<i>evan</i>
	Pl.	<i>ivar</i>	<i>uvar</i>	<i>evar</i>
Feminine	Sg.	<i>idel</i>	<i>udel</i>	<i>edel</i>
	Pl.	<i>ivahin</i>	<i>uvahin</i>	<i>evahin</i>
Neuter	Sg.	<i>id</i>	<i>u:di</i>	<i>e:d/ed</i>
	Pl.	<i>iv(e)</i>	<i>u:v(e)</i>	<i>e:v(e)</i>

Apart from person, number and gender the grammatical dimension (in conjunction with locative adjective) indicates the distinctions

of time, manner, direction, reason, quantification, countability and animacy. Syntactically these demonstrative pronouns represent Noun Phrases with a structure consisting of Modifier + Noun, which in turn derives from an underlying relative clause consisting of Place adverb + Existential verb + Relative marker + Head Noun.

(8a) *adi* 'that object'

(8b) *a: pustakam* 'that book'

(8c) *akkada unna pustakam*

Place Adv Exist V + Re. Noun

(8a) is derived from (8c) by the application of deletion and pronominalisation transformations.

A comparison of demonstratives in Telugu, Manda and Kuvi with that of English and/or Hindi suggests some interesting points, such as

- (a) All languages divide the space into two or more than a two-term system. They do differ on the number of the degrees of distance recognised.
- (b) English and Hindi do not differentiate (lexically) between adjectival demonstratives and the pronominal demonstratives which two are distinguished in Dravidian languages that we are concerned with.
- (c) Number and/or gender agreement within a Noun Phrase between determiner-deictic and the head noun is found in English and Hindi, but not in Dravidian.
- (d) Demonstrative pronouns in Manda, Telugu and other Dravidian languages lexicalise a rich variety of semantic information pertaining to the referent (noun); which is lacking in English and Hindi. But note that English compensates it by having a separate set of the third person pronouns distinct from demonstratives and Hindi does it through its verbal and adjectival concord and other morphological devices.
- (e) In spite of the multitude of deictics in Kuvi, Manda etc., there is a set of unmarked forms in each, and it is this member which is preferred in a neutral situation such as for use as an anaphora. In a discourse context it is the remotest demonstrative which is used for backward

reference, for example Manda uses forms like *e:van*, *e:di* etc., in this context.

4. Summary and desideratum

A description of demonstratives as recognized in the lexical system of certain Dravidian languages has been attempted here. The description demands that the data deserve to be interpreted from several levels of linguistic analysis comprising morphology, syntax, lexical semantics and pragmatics. Thus deixis turns out to be a phenomenon relevant to more than one level of linguistics and any analysis of any language can ill afford to ignore its importance. Especially the relevance of deixis and speech act theory for linguistic analysis suggests the need to interpret language structure from the viewpoint of pragmatics. Any study of languages - be it descriptive, typological or comparative, will have to accommodate the facts, problems and solutions detailed here at some length.

The foregoing investigation has brought out the processes of lexicalization of place deixis through such categories as adjectives, demonstratives and locative adverbs. However, the reflection of spatial deixis in the verb roots equivalent of such verbs as 'come, go, bring, take' etc, is left out for future study. The syntactic processes under investigation, transparently exhibit, on the one hand the centrality of participant deixis, and on the other the unification of the speaker and addressee as a single unit in the pragmatico-semantic structure of the languages. Thus the Dravidian languages preserve much in their lexicon and grammar for the speech act theory and pragmatics, which theories are much debated in the works on philosophy of language, especially by philosophers (cf. Searle, 1969; Stalnaker, 1972; Mey, 1994; and Martinich, 1997).

BIBLIOGRAPHY

- Anderson, S.R. & E.L. Keenan. 1985. Deixis in Shopen, T. (Ed.), *Language Typology and Syntactic Description* Vol. III. Cambridge: Cambridge University Press. Pp. 259-308.
- Asher, R.E. (Ed.). 1994. *The Encyclopedia of Language and Linguistics*. Oxford: Pergamon Press.

Carr, P. 1994. Philosophy of Linguistics and Science in R.E. Asher (Ed.), 1994, Vol. 6, pp. 3027-3028.

Fillmore, C.J. 1982. Towards a Descriptive Framework for Spatial Deixis in Jarvella, R.J. & W. Klein (Eds.), *Speech, Place and Action: Studies in Deixis and Related Topics*. New York: John Wiley & Sons Ltd. Pp. 31-59.

----. 1997. *Lectures on Deixis*. Stanford: CSLT Publications.

Israel, M. 1979. *A Grammar of the Kuvi Language*. Trivandrum: Dravidian Linguistics Association.

Lamarque, P.V. 1994. Philosophy of Language in Asher, R.E. (Ed.), Vol. 6, pp. 3015-3021.

---- (Ed.). 1997. *Concise Encyclopedia of Philosophy of Language*. Oxford: Pergamon Press.

Levinson, S.C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.

Lezzenberg, M. 1997. Indexicals in P.V. Lamarque (Ed.), 1997, pp. 222-226.

Lyons, John. 1968. *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.

----. 1975. Deixis as the Source of Reference in Edward Keenan (Ed.), *Formal Semantics of Natural Language*. Cambridge: Cambridge University Press. Pp. 61-83.

----. 1977. *Semantics* (2 volumes). Cambridge: Cambridge University Press.

----. 1995. *Linguistic Semantics: An Introduction*. Cambridge: Cambridge University Press.

Martinich, A.P. 1997. Philosophy of Language in John V. Canfield (Ed.), *Philosophy of Meaning, Knowledge and Value in the Twentieth Century*. London: Routledge. Pp. 11-38.

Mey, J.L. 1994. Pragmatics in Asher, R.E. (Ed.), 1994, Vol. 6, pp. 3260-3268.

Nagamma Reddy, K. & B. Ramakrishna Reddy. 2003. Socio-pragmatics of Honorific Concord in Telugu in Ramakrishna Reddy, B. (Ed.), *Agreement in Dravidian Languages*, pp. 106-116.

Ramakrishna Reddy, B. 1987. Tense and Aspect in Manda. *Osmania Papers in Linguistics*, Vol. 13. Pp. 20-38.

----. 1990. Some Lexico-grammatical Aspects of Place Deixis in Dravidian and Munda. *International Journal of Dravidian Linguistics*, Vol. XXI. Pp. 46-62.

----. 1991. Predicate Agreement in Dravidian. *PILC Journal of Dravidic Studies*, Vol. 1. Pp. 33-44.

----. 1992. Spatial Deixis in South-Central Dravidian in B. Lakshmibai & B. Ramakrishna Reddy (Eds.), *Studies in Dravidian and General Linguistics: Festschrift for Bh. Krishnamurti*. Hyderabad: Osmania University. Pp. 171-185.

----. 2003. Agreement in Manda: Grammar and Meaning in B. Ramakrishna Reddy (Ed.), *Agreement in Dravidian Languages*. Chennai: International Institute of Tamil Studies. Pp. 220-244.

----. 2006. Person-system in Munda and Dravidian. *Indian Linguistics*, Vol. 67. Pp. 169-182.

----. 2009. Lexical Structure in Manda and Other Languages. *Indian Linguistics*, Vol. 70. Pp. 307-319.

Searle, J.R. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Segerdahl, Par. 1996. *Language Use: A Philosophical Investigation into the Basic Notions of Pragmatics*. London: Macmillan Press Ltd.

Stalnaker, Robert C. 1972. Pragmatics in Donald Davidson & Gilbert Harman (Eds.), *Semantics of Natural Language*. Dordrecht: D. Reidel Publishing Co. Pp. 380-397.

Strawson, P.P. 1971. *Logico-Linguistic Papers*. London: Methuen & Co. Ltd.

CENSUS OF INDIA (LANGUAGE): CONTRIBUTIONS AND ANOMALIES

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Madurai

Early Sources

Tabulation, classification and description of Indian languages have been the primary concern of the language reports of the Indian census works right from 1881 when the recording of mother tongues on an all-India level was undertaken for the first time. Asok Mitra, the Registrar General of India, 1961, writes that "the individual efforts of linguists found a common focus in the decennial census investigations which attempted a series of systematic classifications, beginning with D.C.J. Ibbetson's chapter on languages in his Report on the Census of the Panjab taken in 1881" (in Singh, 1969: iii). Mitra mentions also the following three other works as outstanding contributions among the Census Reports:

- (1) J.A. Baines' Report on the Distribution of the Population According to Mother Tongue in the 1891 Census of India
- (2) E.A. Gait's Report on Assam, Census 1891
- (3) H.A. Stuart's Report on Parent Tongue, Madras, Census 1891.

All these four pre-Grierson Census Reports of 'lasting value and interest' have been reprinted in one of the language monographs of the Census of India, 1961, *Inquiries into the Spoken Languages of India*, authored by Ram Adhar Singh (1969).

The main intention of this paper is to study the contributions made by the Census of India (Language Tables) towards the identification, classification and tabulation of population figures of

Dravidian languages in particular. We will also examine the anomalies found in these works due to the changing policies of the government from time to time. The contributions of individual scholars in the field of Dravidian linguistics are also mentioned as these contributions had been of great support to Census classifications for many decades though at times they have been ignored.

George A. Grierson is always commonly associated with his monumental *Linguistic Survey of India*. Prior to that he was also very much involved with the Census works. His chapter on Mother Tongues in the 1901 Census of India is considered by Asok Mitra as an "advance blueprint and framework of his great *Linguistic Survey of India*" (Ibid.). Grierson's classification was the basis, with minor changes as a result of recent investigations, for the subsequent census reports till 1961.

Apart from the Language Report of the Census of India and the Linguistic Survey of India, the district Gazetteers have also contributed their mite towards the understanding of the Indian language situation to a lesser extent. Some of them have collected information on the dialectal lexical items peculiar to a particular region.

To a student of linguistics who is interested in the history of classification of Indian languages under respective families and groups, census reports are of immense help. The individual efforts of the various scholars who were working in this field have been attested and recognized by these works. Census reports were not mere presentation of facts and figures; they were part of social history. In his introductory volume of the *Linguistic Survey of India*, Grierson presents a historical perspective of the developments that took place in the field of research on Indian languages from earlier period to modern time. He keeps comparing the number, classification and the population figures of the languages in his Survey with that of the census returns of 1921. Asok Mitra points out that "the census of India, by its extensive field organizations and network of able and accomplished teams of civil servants continued to strengthen and sustain the Linguistic Survey in 1911 and 1921" (Census 61: 1964: i) He explains that the India Report for 1931 was able to present census data in a coherent and scientific form largely on account of the competent use it made of the great Linguistic Survey completed in 1927" (Ibid.) Grierson's Survey volumes could very well be considered as exhaustive extension of one facet of

the Indian census, namely the Language Reports. Apart from the Introductory Volume, the volume IV which deals with the Dravidian Family is of great importance to a student of Dravidian Linguistics.

During 1941, language and mother tongue tabulation could not be undertaken due to World War II. In 1951, language data was presented exactly as returned, not with much useful purpose. During 1961 Census it was felt that "the Linguistic Survey classification still held firm and unassailed" and therefore the L.S.I. was to be the norm for the identification, classification or reclassification of the mother tongues.

1961 Census Report (Vol. 1, India, Part II-c (ii) Language Tables, 1964) may be considered as an important document in language reporting by Indian Census. It takes into account post-Grierson research works and departs from Grierson's findings wherever necessary. It provides a detailed account of bilingualism prevalent in the country apart from presenting 1652 mother-tongues returned from all over the country with minute details. R.C. Nigam, the Linguist, wrote the Introductory Note. The question of classification was pursued with utmost care. Some mother tongues had to be classified in the same manner as that of Grierson. In some other cases they had to be reclassified on the basis of the latest research. Yet some other languages had to be maintained as unclassifiable. However, in all these instances Grierson's work remained as the solid base.

The Census Reports on language, right from the beginning and the *Linguistic Survey of India* volumes constitute the major official source of study and documentation of Indian languages. It should, however, be admitted that from 1971 Census the official source was not so much research-oriented as the previous ones. Another important major source of study was that of the individual scholars most of whom were European missionaries and administrators who evinced great interest in the study of Indian languages. Naturally, the field of Dravidian studies also witnessed many scholars engaging themselves in identification and classification of Dravidian languages. The most important among them was Bishop Robert Caldwell who brought out his magnum opus, *A Comparative Grammar of the Dravidian or South Indian Family of Languages* in 1856. Both these sources were complementary to each other and we get a bird's eye view of the research field in Dravidian studies prior to Grierson, in his Introductory Volume of the L.S.I.

References in L.S.I. and Census Reports

Grierson begins by listing the scholars who have just mentioned the names of some languages without any reference to their affinity with any language family.

Abul Fazl (1551-1602) in *Ain-i-Akbari* mentions the languages of Telinganah and Karnatik. J.F. Fritz (1748) while explaining the Indian alphabets has included those of Tamil, Telugu and Kanarese. J.C. Amadutius (1771?) has mentioned Telugica and Tamulica. Iwarus Abel (1782) has prepared a comparative vocabulary of Tamil, Telugu, Kanarese and five other Aryan languages; Peguan (Burmese) is also found included here. We have a reference to William Carey (1793), a Serampore missionary as having wrongly included Tamul, Kurnata and the Telinga as springing from Sanskrit.

At this stage mention must be made of T.P. Meenakshisundaran's assertion (1965: 13) that the study of the Dravidian languages as forming part of one family cannot be traced to any period earlier than the nineteenth century. The reading of a reference of Kumarila Bhatta of seventh century, by Burnell and Caldwell as referring to South Indian languages of Andhra Country and Dravida Country is rejected as incorrect by P.T. Srinivasa Iyengar (in Grierson, Vol. I: 310) and also by T.P. Meenakshisundaran. Further Meenakshisundaran is of the opinion (op. cit.) that it was in the second decade of the nineteenth century that F.W. Ellis of the East India Company pointed out in 1816 the similarity between the four Dravidian languages - Tamil, Telugu, Malayalam and Kannada - as forming an interrelated group. Ellis had, in fact, included Tulu also to his list and made this remarkable observation in his 'Note to the Introduction' written by him and it appeared as a preface to Campbell's *Telugu Grammar*, according to Trautmann (Sundaram, Rm. (Tr.) 2007: 34).

Grierson refers to Brain Houghton Hodgson as the first Englishman to use the term 'Dravidian' for the languages of central and southern India, but he included under the term not only Dravidian languages proper, but also those of an altogether different family - the Munda. It was Max Muller (1854) who for the first time recognized the existence of the Munda family of languages as an independent body of speech.

Grierson talks about another scholar Sir. Erskine Perry (1853) who divided the languages of India into two great classes - the language of intruding Arians or Sanskritoid in the North, and the language of a civilized race in the South of India represented by its most cultivated branch, the Tamil. "The Southern languages, he called Turanian or Tamuloid. He did not seem to be aware of the term 'Dravidian' which was first used simultaneously in 1856 both by Hodgson and by Caldwell", observes Grierson. Perry had mentioned Telugu, Kanarese, Tamil, Malayalam and Tulu. He had also added Gondi with a query. He had made some other interesting observations which are mentioned in Singh (81). He has referred to the likeness between Toda and the Brahui on the mountains of Sindh. He also used the term Gondwani to refer to Gondi language. Of Malayalam and Tulu he observed that they each appeared to be in a course of gradual extinction. It is not clear what prompted him to make such an observation.

Grierson mentions J. Stevenson's (1853) article on comparative vocabulary of the *Non-Sanscrit Vocables of the Vernacular Languages of India* wherein the important question of the borrowing of the Dravidian words by the different Indo-Aryan languages and of its ethnical significance is treated for the first time and with great acumen. Making the 'ni' form of Tamil 2nd person, the nucleus of comparison, Stevenson has included the following languages in one group (having cognates):

Tamil, Malayalam, Telugu, Canarese, Kurgi, Todava, Uraon, Rajmahali, Gondi and Tuluva (in Singh: 1969: 80)

T.P. Meenakshisundaran believes (1965: 13) that the study of Comparative Dravidian was placed on a sound basis by Caldwell in 1856 when his *Comparative Grammar of Dravidian languages* was published. Ever since then, Caldwell's work has been a resource centre for the scholars and the census deliberations in the field of Dravidian Linguistics. In his first edition (1856) Caldwell had listed nine Dravidian languages viz., Tamil, Malayalam, Telugu, Canarese, Tulu, Tuda, Kota, Gond, Khond or Ku. In the second edition (1875) he added Kudagu or Coorg, Oraon and Rajmahal. He included Brahui in the family from which Sindhi and Punjabi had sprung though he identified many grammatical forms and vocables that were distinctly Dravidian. Perhaps, for the first time the sub-grouping of the Dravidian languages was done by him as cultivated dialects and uncultivated dialects. While

Tamil, Malayalam, Telugu, Canarese, Tulu and Kudagu or Coorg were shown under cultivated dialects the rest were identified as uncultivated dialects.

In 1867, John Beames, writing on the 'classification of languages' included the following 12 languages in Dravidian class which in turn he grouped under Turanian family (in Singh, 1969: 86):

Telugu, Tamil, Kanarese, Malayalam, Tuluvu, Kodagu, Tudu, Budugar, Irular, Kohatar, Brahui and Singhalese. It may be noted that the present names of Tulu, Toda, Badaga and Kota were spelt differently. An Aryan language, Singhalese has been treated as Dravidian by Beames.

R.N. Cust (1878) has given a list of following Dravidian languages in his *A Sketch of the Modern Languages of the East Indies* (in Singh, 1969: 86-87):

Tamil, Telugu, Kanarese, Malayalam, Tulu, Kudagu, Toda, Kota, Khond, Gond, Oraon, Rajmahali, Keikadi and Yerukala.

Cust treats Irula and Kuruba as dialects of Tamil; he also refers to one other dialect spoken by Malerasas as coming under Tamil. Keikadi and Yerukala which were given independent status by him were subsequently treated as dialects of Tamil by other scholars.

The above languages and Brahui had been identified as belonging to the Dravidian family by the census works and individual scholars by the time a plan to undertake the Linguistic Survey of India was proposed before the Vienna Oriental Congress in 1866 (Singh, 1969: 88).

Census 1881 Report had given an independent status to Kaikadi / Kaikari and Maler. However they were not found in 1891 Census Report. Instead, Sinhalese and Mahl were included as independent South-Dravidian languages. Mal-Paharia and Kharwar were shown as North-Dravidian languages. Noticing that Kanarese character had been adopted in printing modern Tulu works, Baines observed that Tulu will ultimately give way to Kanarese; however, he also mentioned that Tulu showed an increase of $10\frac{1}{4}$ percent over the return of 1881. Toda,

though spoken by only 736 persons, had shown an increase of 63 persons against 1881 Census. Kharwar with 7,651 speakers makes a new appearance. Perhaps, it was not heard later on.

H.A. Stuart in his Report (Census 1891-Madras, Chapter VIII, Parent Tongue) acknowledges the classification of Caldwell with the addition of Mahl to his list though he himself is not quite convinced of this. He lists the following 11 languages including their dialects:

Tamil, Telugu, Malayalam, Mahl, Canarese, Tulu, Khond, Gond, Toda, Kota and Kodagu.

The last three languages had only 736, 1201 and 947 speakers respectively. Of the Uriya (Oriya) language he was of the view that while its vocabulary was Aryan, many of its grammatical forms and much of its structure were essentially Dravidian. Of the Hindustani speakers, he points out that many males even though they had either Tamil or Malayalam as their house language, had returned Hindustani as their mother tongue from a desire to assert a fictitious foreign origin.

Saurashtra language as spoken in Tamilnadu is hardly intelligible to a Gujarati speaker nowadays, but Stuart asserts that there was no difficulty in understanding it by the help of the knowledge of the parent language, Gujarati.

Stuart has made an interesting observation about Kurumba language in Pudukota feudatory state (Present Pudukkottai district in Tamilnadu). As against 3601 speakers in 1881, it had been returned by 1546 persons in 1891. Referring to Nelson's *Manual of the Madura District* (part II: 50), Stuart states that the Kallans, the principal caste in Pudukota were thought by some to be a section of the Kurumba tribe.

The Chapter on language for the Census of India, 1901 was contributed by Grierson who was then in charge of the Linguistic Survey of India. This chapter is a reflection of the earlier trends in Dravidian language studies. It follows B.H. Hodgson's stand that included Munda languages under Dravidian family. Though Max Muller had proved Munda languages as constituting an independent family by 1854, Grierson was still under the influence of Hodgson's theory and by 1901 he was still talking about a Dravido-Munda Family with a Munda sub-family and a Dravidian sub-family. After this chapter

had been sent to the press, Grierson's Linguistic survey had reached the Munda languages and on close examination he realized the differences. He inserted a footnote which reads as follows: "The result of the comparative examination of these forms of speech, which is now being made for the first time will probably show that the Munda and Dravidian Languages have not a common origin. The matter is, however still sub-judice" (in Census 61: 390).

Grierson had identified the following languages as belonging to the Dravidian Sub-Family: (1) Tamil (2) Malayalam (3) Telugu (4) Kanarese (5) Kodagu (6) Tulu (7) Toda (8) Kota (9) Gond (including Kolami) (10) Kandh (11) Kurukh (12) Malhar (13) Malto (14) Brahui. However, there are some discrepancies between this table of Dravidian family members and the diagram that follows, to show the relationship which existed among them. In the table, Gond is shown as including Kolami; but in the diagram Kolami is given an independent status. Malhar, which is given an independent status in the table is not treated so in the diagram. While the name Kandh is preferred in the table, Kui is used in the diagram. Grierson recognized Brahui as belonging to Dravidian family on the basis of the research works done by Trumpp (1880) and Duka (1887) though Caldwell was hesitant to accord Brahui a Dravidian label. Though Malhar 'seemed to be a corrupt Kurukh', Grierson did not club it with Kurukh even though the number of speakers was just 465. Grierson had classified the Dravidian languages into three groups under what he termed as Original Dravidian Language. Dravidian languages group included Tamil, Malayalam, Tulu, Kodagu, Toda, Kota, Kanarese, Kurukh and Malto while Kolami and Telugu were grouped under Andhra language group. Brahui was shown as a separate group. Grierson was perhaps not quite sure about the relationship of Gond and Kui and they were shown as having related to both Dravidian language group and Andhra language group. Following Caldwell, Toda and Kota have been treated as distinct languages.

Grierson considered *Linguistic Survey* as a continuation of Census 1901 and he makes this very clear when making remarks such as 'the Linguistic Survey would finally dispose of them' (in Census 61: 396) whenever he could not come to a firm conclusion regarding the status of certain mother tongues. He found Ladhadi so mixed with Aryan elements that its final classification in census 1901 was doubtful (Ibid: 397);

after the Survey he classified it as semi-Dravidian hybrid under Dravidian family.

Grierson's devotion and commitment to his census and survey works could be better understood when we look at the list of scholars in different parts of the world he consulted¹ before finalising his reports. He was eager to incorporate the latest research findings in his reports. Obviously, he wanted the census reports to be a treasure house of knowledge rather than a book of tabulated figures; neither did he want his report merely to be a government document to be filed and stored somewhere in a darkroom.

Grierson in his *Linguistic Survey*, Vol. IV has listed 17 Dravidian languages under five groups viz., Dravidian Group, Intermediate Group, Andhra Language, North Language and Semi-Dravidian Hybrids. Malhar under Intermediate group, and the two hybrids, Ladhadi and Bharia were added to his 1901 Census list.

As mentioned earlier, language report of the Census 61 is very exhaustive and highly informative. The Introductory Note by R.C. Nigam presents a brief history of the contributions by a number of scholars for more than two centuries on the identification and classification of Indian languages. While evaluating the Linguistic Survey Reports, he emphasizes the need to follow Grierson's classification as formulated in L.S.I., and lists the limitations of the Survey; the need for comprehensive revision at appropriate contexts in light of the modern methods of linguistic research is pointed out (in Census 61: cLix ff). As a result, Census 61 saw a reassessment of Grierson's classification of Dravidian languages. The languages / dialects were broadly arranged geographically and the relative positions of particular language / dialect was discussed with reference to its situation in the South, Central, or North Dravidian areas. Subsequently, the Dravidian languages were classified into three groups viz., South Dravidian (9 languages), Central Dravidian (13 languages) and North-Dravidian (3 languages). The Telugu language area being

1. Grierson has expressed his special obligations to the following scholars who helped him in finalising the chapter VII (Language), census 1901:

Rev. T. Grahame Bayley, Mr. Gait, Mr. W. Irwine, Dr. Sten Konow: Christiania, Prof. F. Kuhn: Munich, Sir. Charles Lyall, Peter W. Schmidt: Vienna, Mr. Vincent Smith, Prof. Jullen Vinson: Paris (in Census 61: 371).

geographically contiguous to both South and Central Dravidian, was considered occupying a middle position between the two groups and had been shown in both South Dravidian and Central Dravidian areas. (Ibid.: cxciv-cxcv)

Dravidian Speakers

Census Tables are the only source of knowing the exact number of persons speaking a language / a family of languages. The number of speakers of Dravidian languages that have been recorded in a few Censuses of India are given below:

Table 1

Year	Number of Speakers of Dravidian languages in India	Percentage to the total population of India
1961	107, 410, 820	24.47
1991	188, 945, 126	22.53
2001	214, 172, 874	20.82

The strength of Dravidian speakers which was 24.47 percent during 1961 has come down to 20.82 in the latest census in 2001. In other words, the Dravidian speakers who constituted one fourth of the Indian population in 1961, now constitute only one fifth of the population. This may perhaps be due to the lower birth-rate in the four Dravidian-Speaking states against the national average of 22.7 per thousand. During the period of 2007-08, Tamilnadu had registered a birth-rate of 16.0, Kerala 14.6, Andhra Pradesh 18.4 and Karnataka 19.8.

What has been presented above simply highlights the contributions by the Indian Census Organizations in the field of Dravidian linguistics for a long time. Only some significant reports which are of enduring value in understanding the history of identification and classification of Dravidian languages have been mentioned. The intention of this paper is not to reproduce the entire history of Dravidian linguistics. It is mainly with the intention of exposing the students of Dravidian linguistics to the contributions of Indian Census that some important events have been presented. What is to be underlined is the manner how an official machinery conducted its deliberations as a research organization without the interference of the government.

By highlighting certain Census Reports and the classifications found there we do not in the meantime swear by them and the limitations and drawbacks of these reports and the possible errors of judgment that would have crept into them are realized. A student of Dravidian linguistics is well aware of the frequent modifications in the classificatory system and the fluctuating number of Dravidian languages effected as the results of latest research of different scholars working in the field. It is only appropriate to remember Andronov's words in this context when he wrote that "genetic affiliations inside the Dravidian linguistic system have not yet been completely classified. Different classifications of the Dravidian languages were put forward at different stages of their study" (1970: 23).

Rationalization of Mother Tongue Names

Indian Census had to face another problem while tabulations were made. Identification and rationalization of mother tongue names had always been a challenging task for the census reports. J.A. Baines who wrote the *General Report*, 1891 raised this problem and discussed the reasons for them. They were encountered probably because of the instructions given to the enumerators. They were strictly instructed to 'enter the language ordinarily spoken in the household of the parent whether it be that of the place of enumeration or not'. Baines explains that "the first impulse in many cases, is to return the name of the caste as that of the language. In other instances the name of the district or state will be returned" (in Singh, 1969: 310). This is corroborated by Stuart who wrote the *Report of Madras*. He lists the multitude of names for the same language, the caste, tribe or place name being given as the name of the parent-tongue and synonyms as some reasons for experiencing difficulties in rationalization of names. He has provided a long list of such names returned from Madras presidency. A few illustrations from the list:

Aruppar, Arukala, Bhumia, Chalaya, Goundan, Jogi, Korava	Caste names
Andhra, Kalingi, Tivu Bhasha, Maldivian, Malabari	Place names
Kora, Korava, Korcha, Koracha	Synonyms for 'Korava'

Such returns help to study the common people's understanding of what is a mother tongue. The instructions given to the enumerators seeks to elicit 'what is the parent's tongue' rather than 'what is your mother tongue'². Once the speech is associated with the parents, people immediately think about their own tradition / history. The community with which one lives and the place where he has been living for a long time seem to be more important to a common man rather than what form of speech he uses. The caste or place names which are used by the speakers are not alternative names of their mother tongue; they are neither substitutes nor tokens that stand for another mother tongue. As far as these speakers are concerned they are the names of their speech and they cannot conceive of any other name. Most of the languages in India are named after the places where they are spoken, perhaps due to such thinking.

Due to this association of language with place and caste, it is possible that people may not be able to recognize their mother tongue's standard name. Grierson who had similar problems during his survey in North-India explains that "the average native rarely knows the name of his own dialect, though he can recognize without difficulty the dialect spoken by a stranger". When Grierson went into the tract and asked for the speakers of Jangali, the language of the forest boor, he was assured that it was not to be found 'here' but was the speech of the fellow a little further on. As he went on further he got the same reply. (in Census 61: 372). It seems that everybody knows the name of another man's mother tongue but not his own.

R.C. Nigam in his Introductory Note, Census 1961 explains similar problems that were faced during the rationalization of mother tongue names. In pockets of linguistic border, the enumerators might have encountered some difficulty and in large urban cities where migrants are numerous, there would have been problems. Transliteration of mother tongue names from the regional language into English might be the reason for some errors. All such problems were sorted out by further scrutiny of data, spot-checks or collection of sample data for analysis. (in Census 61: cLxii). A few examples from the list of mother tongues, Census 61 are given here:

2. During 1961 Census the following explanation with a slight modification was given. "Mother tongue is language spoken in childhood by person's mother to the person or mainly spoken in the household" (in Census 61: ccxLiii).

Kongar, Madurai, Madrasi	Place names
Korava, Solaga, Kosavan, Kallar	Caste/Tribe names
Udaiyarmoli, Valluvarmoli, Pattappu Bhasha	

All the 1652 mother tongue names returned during Census 61 were subjected to thorough scrutiny before rationalization.³

Policy-Shift

From the Census 1971 onwards there was a major policy-shift in the method of presentation of mother tongues. Perhaps, for the first time in the history of Indian Census, the government took a decision as to how the Language Report has to be presented to the nation. Government's policy is explained by M. Vijayanunni, the Registrar General of India - 1991, in the *Language Atlas of India - 1991* published by him (2004). In his Introductory Note he has pointed out that the Census Organization had been publishing all mother tongue data from 1881 onwards till 1961. The question of restricted publication of speaker's strength (i.e. only those mother tongues having 10,000 or more speakers at all-India level and which are linguistically identified to be published) was decided by the government since the Census 1971 (vii).

Vijayanunni in his Preface to the All-India Language Table (C-7) emphasizes the fact that it is important that data on mother tongues and languages are disseminated, studied and researched extensively so that they flower and flourish because, he adds that, if a language dies, thousands of years of experience, literature, knowledge and cultural diversity as well as the very identity of the people would be lost forever" (1999: iii). Lofty ideal indeed! It is the greatest irony of Indian Census to find the same Registrar General writing his General Note in the same volume immediately after the Contents page, making

3. In order to understand how this scrutiny was carried out, one is recommended to refer to Census 1961 - Language Tables (cxcvii, cxcviii) as a case of illustration. Here, twenty-two mother tongue names, which were mostly caste names, had been returned from all over India. Individual slips were scrutinized and as a result, caste identity, transcriptional error, name of native place, synonym, etc., were found to be the reasons for the return of multiple names. In the case of one return short specimens of speech were collected for analysis. Ultimately these returns were grouped under Tamil. Some other names were found traceable in **Linguistic Survey** under Tamil.

the following statement: "Those which returned less than 10,000 speakers each and were classified under a language have not been specifically mentioned but included in 'others' under that language" (Ibid: 1). He makes it once again very clear that "the presentation of 1991 language data is based on the same principles as were adopted for the 1971 and 1981 censuses". (Ibid: 2). As a result of this government policy, a large number of minor languages have disappeared from the linguistic map of India.

In his Note to the 1961 Census Report, the then Registrar General, A. Mitra set to himself three tasks for mother tongue tabulation. The first task was to distribute the language data under the 14 languages of Schedule VIII. The second was to present a second set of tables dividing the languages into class ranges of population viz., (a) by more than 500,000 persons each (b) 100,000-499,999 and (c) less than 100,000. The third task was to present the residual mother tongues and populations speaking them into smaller class ranges of population *down to those spoken by one person each*, (emphasis added) (iii-iv). Following this, we find a list of more than 200 mother tongues, beginning with Abhahatik to Yaskhila, returned as spoken by just one person (198-200). It is indeed a strange and unbelievable linguistic scenario. R.C. Nigam in his Introductory Note rightly says that they should be spared serious consideration and summarily marked spurious (p. ccxxiv). What is of interest to us is the manner how the Census 61 was bent upon accounting for every single speaker in the country and the manner in which subsequent censuses are treating large number of speakers of the minor languages.

From the five chief Dravidian languages identified by F.W. Ellis and the nine languages under two groups identified by Caldwell (first edition), the number of Dravidian languages had gone up to fifteen by the year 1886. *Linguistic Survey* had identified eighteen languages included into five groups. However, in 1946, Jules Bloch was not that much impressed with the number and he counted only ten. He felt that "there was no full information regarding the dialects of the mountains to the north of Palghat Pass; those of Coorg, as also of the mixed society composed of the Badaga agriculturalists, the Kota artisans and the Toda shepherds..." (in R.G. Harshe (Tr.) 1954: xxvii) Census 1961 had listed twenty-five languages under three groups. Andronov in 1970 had mentioned twenty four under seven heads. Zvelebil's classification

which is followed in *Dravidian Encyclopaedia* (1997: Vol. III) mentions twenty six languages under four groups. Bh. Krishnamurti (2003) also refers to twenty six languages under four groups. Though the number of languages is the same, the languages and the groupings are not found to be necessarily the same.

Since 1961 Census we find a number of scholars working in the field of Dravidian Linguistics, who have identified new languages. While some of the earlier languages have been denied independent status, the classificatory system has changed from scholar to scholar.

Census Reports since 1971 are silent about such developments in the respective areas; they are nothing but jungle of tabulated figures. The practice of classification of the languages under different groups has been given up; the habit of consulting the linguistic experts or referring to their works on latest research findings has become a casualty due to the government's policy which has resulted in the increase of population of major languages and the disappearance of minor languages. The Census 1961 had identified one hundred and eighty seven languages that could be classified under respective groups and family. Census 1971 had reduced them to 105 languages without assigning any reason. The list included 15 scheduled languages and 90 non-scheduled languages. Census 1991 had 114 languages, which included 18 scheduled languages and 96 non-scheduled languages. Census 2001 has listed 122 languages including 22 scheduled and 100 non-scheduled languages broadly classified under respective families without any reference to the groups and branches. The following nine languages have been added to the list found in 1991.

- | | |
|-----------------------|--|
| 1) Shina (Indo-Aryan) | 2) Afghani / Kabuli / Pashto (Iranian) |
| 3) Persian (Iranian) | 4) Balti |
| 5) Khienmnungan | 6) Ladakhi |
| 7) Rai | 8) Simte |
| 9) Tamang | (All Tibeto-Burmese) |

Mao, a language of Tibeto-Chinese Family, returned by 60,688 persons from Manipur during 1991 Census and by about 29,000 persons from Manipur during 1961 Census does not find a place during 2001 Census. This may be due to the fact that the total population of India

excluded figures of Paomata, Mao Maram and Purul subdivisions of Senapati district of Manipur. The reason for the exclusion, however, is not given in the Report. While the name of the larger family, Tibeto-Chinese was used in 1961 Census following Grierson, during 2001 Census the name of the sub-family, Tibeto-Burmese is preferred to refer to the family.

Coming to Dravidian Languages, we find Jatapu being given an independent status in the report of Census 2001, following Census 1991 report. This had been marked 'unclassified' during 1961. No Dravidian expert in the field seems to have treated it as an independent language. All the following 17 languages listed under Dravidian family in 2001 Census are also found listed in 1991 Census.

1) Coorgi / Kodagu	2) Gondi	3) Jatapu
4) Kannada	5) Khond / Kondh	6) Kisan
7) Kolami	8) Konda	9) Koya
10) Kui	11) Kurukh / Oraon	12) Malayalam
13) Malto	14) Parji	15) Tamil
16) Telugu	17) Tulu	

The total number of Dravidian languages has been given as twenty-six by scholars like Zvelebil and Bh. Krishnamurti. This has not been taken into consideration by the Registrar General. As a result, we do not find a number of Dravidian languages which were spoken by less than 10,000 persons in the list. They have simply wiped out of the Indian demographic map.

We have earlier seen that though Malhar language seemed to Grierson to be a corrupt Kurukh, being spoken only by 465 persons, he did not deem it proper to club this language with Kurukh. 1891 Census reported that Toda, Kota and Kodagu languages were spoken by 736, 1201 and 947 speakers respectively; yet they were retained as such. In his General Report, Baines had observed that Tulu will give way to Kanarese which however did not deter him from treating Tulu as an independent language. Of the Toda tribe, he remarks that 'the tribe has received a great deal of attention, ethnological, phonological, social and linguistic' (in Singh, 1969: 327). In spite of Jules Bloch's observation that Toda shepherds who were not more than 600... were destined to

disappear in the near future, (op.cit.) the tribe is still surviving. During 1961 Census, Toda and Kota were returned by 765 and 956 persons and both the languages were retained. However, the Census of India with a simple policy of the government has made these languages disappear at one stroke from the Dravidian linguistic world!

We will never know how many Dravidian mother tongues were returned since Census 71. In case the Indian government raises the lower limit to one lakh speakers from ten thousand, in the next census, three more languages, Jatapu, Konda and Parji will be lost. If we compare the census 2001 list with that of Bh. Krishnamurti (2003) as a reference mark, the following Dravidian languages are not found in the official document of the government of India. (Language Table C-16, Census 2001):

Southern Group	1) Irula	2) Toda	3) Kota	4) Koraga
Central Group	5) Naikri	6) Naiki (Chanda)	7) Ollari	
South Central Group	8) Kuvi	9) Pengo	10) Manda	
Northern Group	11) Brahui			

Kurumba and Badaga have been treated as dialects of Kannada, not as independent languages. In future we shall never know what would happen to the speakers of these mother tongues or under which languages they would be clubbed.

While the minor languages spoken by less than 10,000 speakers are badly affected by the policy of the government, some of the major languages have gained at the level of demographic count; the total number of speakers of these major languages have gone up. To be exact, their numbers have been inflated at the cost of minor languages. And this is done freely even as D.K. Sikri, the Registrar General, 2001 emphasizes with conviction that "the data on Mother Tongues and Languages are historically important particularly in a pluri-lingual and pluri-cultural society as ours representing different ethnicity and identity" (Language Table, C-16, Census 2001, Preface).

Elimination of Minor Languages

It is true that the policy-shift has affected all the language families. For example, the Census 61 had listed 53 languages as

belonging to Indo-Aryan Sub-Family; but in the Census 2001, we get only 21 languages being listed, eliminating more than half of the languages. When we look at the collateral effect of major languages gaining at the cost of minor languages, it has 'benefited' the Indo-Aryan languages more than the Dravidian languages. Perhaps this may be due to the fact that Dravidian tribal languages which are worst affected are commonly spoken by lesser number of speakers and adding up their numbers to a major language does not make much difference. There is one more reason which should be pointed out in this context. A number of languages which had been treated with independent status during Census 1961 have been grouped under major Indo-Aryan languages even if they are spoken by more than 10,000 persons. Unfortunately, the subsequent reports from 1971 Census onwards do not explain the reason for the same; neither did they try to prove that 1961 Census classification was wrong, using the findings of the latest research works. No experts' opinions seem to have been sought.

The following table gives the total number of speakers of top five scheduled languages from 1961 to 2001 Censuses:

Table 2

	1961	1971	1981	1991	2001
Hindi	133,435,360	208,514,005*	264,514,117*	337,272,114*	422,048,642
Bengali	33,888,939	44,792,312	51,298,319	69,595,738	83,369,769
Telugu	37,668,132	44,756,923	50,624,611	66,017,615	74,002,856
Marathi	33,286,771	41,765,190	49,452,922	62,481,681	71,936,894
Tamil	30,562,706	37,690,106	N-A	53,006,368	60,793,814

When the policy-shift was introduced during 1971 Census, we find Hindi registering a huge increase of 75 million speakers in one decade. When we compare the growth of these languages during the four decades, it is found that population of Hindi has increased more than three times from 1961 to 2001, while Bengali and Marathi have

* Includes the figures of Maithili; however the 2001 Census Table gives the total figures after excluding the Maithili speakers as 2002,767,971 (1971), 257,749,009 (1981) and 329,518,087 (1991).

N-A = Not Available.

more than doubled their population. The two Dravidian languages Telugu and Tamil have just managed to double their figures.

According to *Language Handbook on Mother Tongues in Census* (Census Centenary Monograph No: 10, 1971 - Mother tongues), the provisional figures of top five mother tongues during 1971 Census were as follows:

Table 3

Hindi	153,729,062
Telugu	47,707,697
Bengali	44,521,533
Marathi	41,723,893
Tamil	37,592,794

While there is very little difference between the provisional and the final figures of Telugu, Bengali, Marathi and Tamil languages, there is a vast difference of more than 54 Million speakers in the case of Hindi. This may be due to the clubbing of many minor languages with Hindi⁴.

As mentioned earlier, some languages with a large number of speakers, which had been treated as independent languages during Census 61, following Grierson’s classification, have also been clubbed with Hindi. Some of them could be cited in Language Table, Census 2001 (89 ff).

- 1) Bhojpuri (33 million)
- 2) Chameali (126 thousand)
- 3) Churahi (61 thousand)
- 4) Garhwali (2.2 million)
- 5) Jaunsari (114 thousand)
- 6) Khairari (11 thousand)
- 7) Kumauni (2 million)
- 8) Kurmalī Thar (425 thousand)
- 9) Lāmani / Lambadi (2.7 million)
- 10) Magadhi / Magahi (13.9 million)
- 11) Malvi (5.5 million)
- 12) Mandeali (612 thousand)
- 13) Marwari (7.9 million)
- 14) Mewari (5 million)

4. See also Chapter 2 in the present writer’s book, **Language Attitude of the Dispersed Tamils and the Neo-Tamils** (2006).

- 15) Mewati (645 thousand)
- 16) Rajasthani (18.3 million)and
- 17) Total of other Mother tongues
with less than 10,000 speakers each (14.7 million)

Except Bengali during 1991, when ‘Others’ Category under it included 2.7 million speakers, other languages do not seem to have been bestowed with this ‘advantage’.

All these details as available in Language Table C-16 (Census 2001: 3-4) have been reworked for the top five languages and presented in a tabular form so as to understand how the total number of speakers of a major language is tabulated.

Table 4

Language	NS	NM	TP
(1)	(2)	(3)	(4)
Hindi	257,919,635	48 (149, 351, 741)	14,777,266
Bengali	82,462,437	3 (322, 216)	585,116
Telugu	73,817,148	1 (171, 725)	13,983
Marathi	71,701,478	Nil	235,416
Tamil	60,655,813	2 (93, 227)	44,774
[NS = Number of speakers who returned as mother tongue; NM = Number of mother tongues with more than 10,000 speakers each whose population is added to the major language and population figures (in brackets); TP = Total population of those mother tongues with less than 10,000 speakers each, clubbed under ‘others’ category]			

By adding columns 2, 3 and 4 we get the total number of the speakers of each major language, as shown in Table 2.

Inconsistent Language Policy

The status of Maithili language is a clear example of arbitrary grouping of mother tongues under a major language. Grierson had treated Maithili as a dialect of Bihari language, under Eastern Group. (LSI: Vol. I: 149). Same grouping is found to have been followed during

Census 1961 too (ccxxv). However, from 1971 onwards it was grouped under Hindi. Maithili speakers who were demanding that their mother tongue be included in the VIII schedule of the Indian constitution succeeded in their effort and Maithili, along with Bodo, Dogri and Santali was added to the VIII schedule, consequent to passing of the 100th Amendment Act, 2003. As a result of this, the population figures of Hindi as given in the tables of 1971, 1981 and 1991 have been revised deducting the Maithili figures (see Table 2). Maithili's new status as the language of the constitution has won for itself an independent status; it was the people's power rather than linguistic considerations which effected a change in the grouping of mother tongues. The population figures of Hindi, during Census 2001 (published in 2008) do not include those of Maithili language. Probably, Bhojpuri might follow suit very soon.

15 Indo-Aryan languages, 4 Dravidian languages, 2 Tibeto-Burmese languages and 1 Austro-Asiatic language have been included in the VIII Schedule of the constitution. However the criteria for selection is not clear and consistent. If population strength is one reason, languages like Bhili (9 million), Khandhesi (2 million), Kurukh / Oraon (1.7 million) and Tulu (1.7 million) should also be considered for inclusion. Population of these languages exceed those of Sanskrit, Bodo and Manipuri which are already scheduled. If literary wealth is one reason, Tulu stands a better chance than some of the recently added languages.

It is very difficult to understand the motivation behind the government's unilateral decision to eliminate the minor languages with less than 10,000 speakers. Of course, by printing all those minor languages with speakers down to one, providing all details, the Census Table might look voluminous and huge. Yet, the telephone directories of our metropolitan cities will be much larger than the Census Table, and the government has not thought of pruning them.

The former U.S.S.R. and India were considered to be the museums of languages. With U.S.S.R. totally disintegrated, India happens to be the remaining one. By eliminating hundreds of mother tongues and clubbing few hundred others under major languages, this policy-shift of the government might create an impression that India is

after all not that much multilingual. If the multilingual character of a nation is forcefully destroyed, it will certainly sound the death-knell to the pluri-cultural character of the nation. The silence of our academics in this context should also be mentioned here. Very few academics are interested in scrutinizing the census tables and government's policies are seldom subjected to serious discussions. It is true that the minor languages have become the most endangered species in the Indian demographic world today.

However, a recent move by the Government of India could very well be considered as signalling a change of attitude. The Government has approved a 'Mother tongue Survey of India Project' in the XIth five-year plan, to be executed by the Language Division, Office of the Registrar-General, India. This project 'has been planned to study the unclassified mother tongues of 2001 Census for identification purpose through the outsourced scholars recommended by different Universities of India and aims to identify those unclassified mother tongues of 2001 Census by spot-verification study'. Though it is limited to the unclassified mother tongues, it is quite refreshing to note that a number of research fellows from the Department of Linguistics of many Indian universities will be involved in this project. A fruitful collaboration between the census network and the academic world is indeed a welcome step. This project should be extended to all the mother tongues including those which are classified or reclassified and those spoken by any number of speakers during the 2011 Census deliberations. It is also fervently hoped that the expertise of the senior scholars who are working in different fields of Indian Linguistics is thoroughly utilised.

BIBLIOGRAPHY

- Andronov, M.S. 1970. *Dravidian Languages*. Moscow: Nauka Publishing House.
- Bloch, Jules. 1954. *The Grammatical Structure of Dravidian Languages*. R.G. Harshè (Tr.). Poona: Deccan College.
- Caldwell, Robert. 1956. *A Comparative Grammar of the Dravidian Languages or South Indian Family of Languages* (First Edition: 1856). Reprint. Madras.

Grierson, G.A. 1927. *Linguistic Survey of India* Vols. I & IV. Reprint 1973.

Krishnamurti, Bh. 2003. *The Dravidian Languages*. Cambridge: Cambridge University Press.

Meenakshisundaran, T.P. 1965. *A History of Tamil Language*. Poona: Deccan College.

Neethivanan, J. 2006. *Language Attitude of the Dispersed Tamils and the Neo-Tamils*. Thiruvananthapuram: Dravidian Linguistics Association.

Singh, R.A. 1969. *Inquires into the Spoken Languages of India*. Census of India - 1961, Language Monograph. Delhi.

Subramoniam, V.I. (Ed.). 1997. *Dravidian Encyclopaedia*, Vol. III. Thiruvananthapuram: International School of Dravidian Linguistics.

Trautmann, T.R. 2007. *Languages and Nation: The Dravidian Proof in Colonial Madras*. Rm. Sundaram (Tr.). Chennai: Kaalaccuvatu Publications. 2007.

Census Reports

Census of India, 1961. Volume 1. India. Part II-c (ii) - Language Tables, 1964.

Census of India, 1971. *Language Hand Book on Mother Tongues in Census*. Census Centenary Monograph No. 10.

Census of India, 1991. Series 1. India. Part IV-B(i)(a)-C series, 1999.

Census of India, 1991. *Language Atlas of India*, 2004.

Census of India, 2001. Series 1. India. Language. Table C-16, 2008.

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DEVELOPMENT OF SEGMENTAL PHONOLOGY: A CASE STUDY OF TWO ORIYA SPEAKING CHILDREN

PANCHANAN MOHANTY

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"Language development during the first twelve months lies neither in the auditory system nor in the vocal tract, but in the cognitive (linguistic) computation that relates one to the other and to the phonological grammar of the specific language being acquired."- Barbara Lust (2006: 148)

1. Introduction

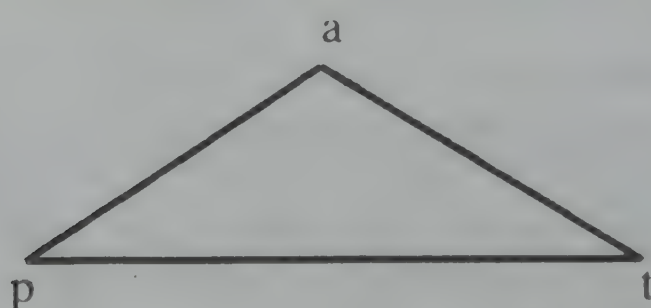
According to Jakobson (1968) and Jakobson and Halle (1971), phonological development takes place in two discontinuous periods: (i) prelinguistic babbling period and (ii) linguistic period.¹ In the former period the speech-sounds produced by children do not follow any order, and these sounds have no relation with those which appear in the next period. On the contrary, children do follow a strict and invariant order in the acquisition of phonology in the latter period; and this order is universal. These findings of Jakobson interested scholars working in the field of linguistics and psychology in looking afresh at how children learn languages and his hypothesis that there were two discontinuous periods was questioned seriously. Oller et al. (1976) present data to prove that the basic preferences found in babbling children are available in their speech after they enter the linguistic period. Kent and Bauer (1985) show that children's vocalization at 1;1²

1. Shvachkin (1973), who worked independently and Jakobson (1968), holds a similar view that there are two distinctly marked periods in the development of child language which are: (i) prephonemic and prosodic speech and (ii) phonemic speech. He also determines a number of universal stages in child language development, which have been questioned by Garnica (1973).

2. The first digit indicates year and the second, month.

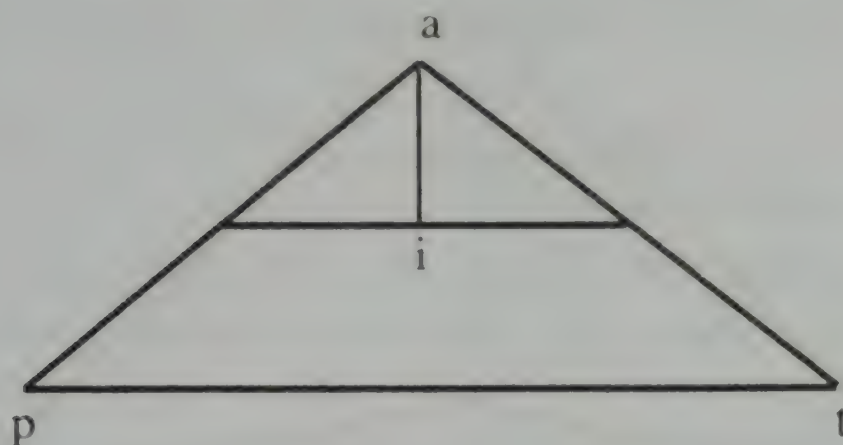
are in continuity with both their babbling on the one hand and later speech in the second year on the other. Vihman et al. (1985) adduce evidence which ostentatiously weakens Jakobson's discontinuity hypothesis. Werker and Tees (1984) state that children do make systematic phonological distinctions during babbling even though some of these distinctions are not found in adults' speech. Their English-speaking subjects at 0;6 to 0;8 discriminated between glottalized velar and uvular stops, i.e. /k':q'/ found in Thomson, an Amerindian language spoken in Western Canada, and between dental and retroflex stops, i.e. /t:t/ found in Hindi spoken in India. A decline was noticed in their discriminating sensitivity between 0;8 and 0;10 and their performance was as bad as their adult counterparts between 0;10 and 0;12 because it was natural for them to lose distinctions which were not found in English.

However, on the basis of his observations about the acquisition of phonemes in a particular sequential order, Jakobson arrived at the conclusion that there is a hierarchy among vowels as well as consonants. According to him, /a/ is the most unmarked of all vowels and that is why the first vowel each and every child uses in his/her speech is nothing else but /a/. He argues that the emergence of phonemes in children's speech follow the principle of 'maximal contrast' (Jakobson 1968:14). This means after the emergence of the first phoneme, the second to appear must be the one which is maximally opposed to it. Since the first phoneme /a/ is a vowel, which affords maximum opening, it is quite obvious that the second phoneme has to be a consonant with total closure, which is a stop. According to him, this consonant is /p/; because 'among the stops it is the labials which obstruct the oral cavity completely' (Jakobson 1968:14). It appears almost simultaneously with /a/. and /t/ is the third phoneme to appear in child language (Jakobson 1968:10). This emergence of /a/, /p/ and /t/ can be put in a triangular diagram which Jakobson and Halle (1971:52) call the 'primary triangle'.

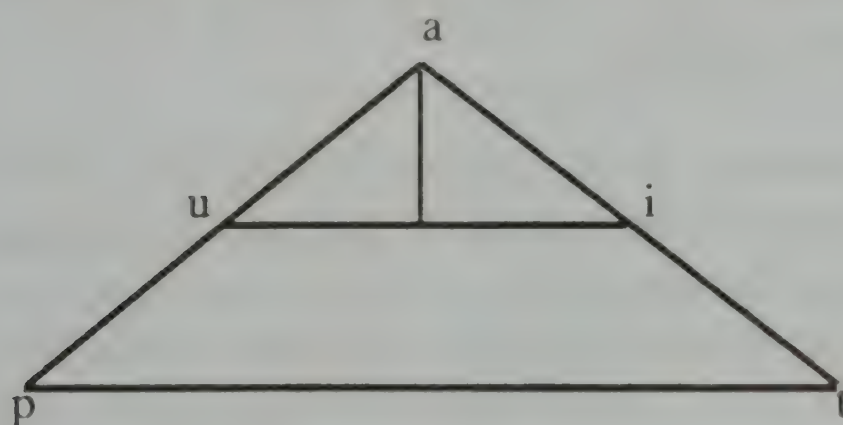


They argue that this primary triangle splits into two triangles, such as the vowel triangle and the consonant triangle later. Since /a/ is a

wide vowel, the second vowel to emerge has to be a narrow one that is /i/; because /a/ and /i/ are the respective wide and narrow vowels which are defined in articulatory terms in languages (Ladefoged 1975: 1956). This is the second stage in phonological development, and it can be represented in a diagram as follows³:



Then, in the third stage /i/ further splits into front and back vowels giving rise to the opposition between /i/ and /u/. This stage can be represented in a diagram as follows:



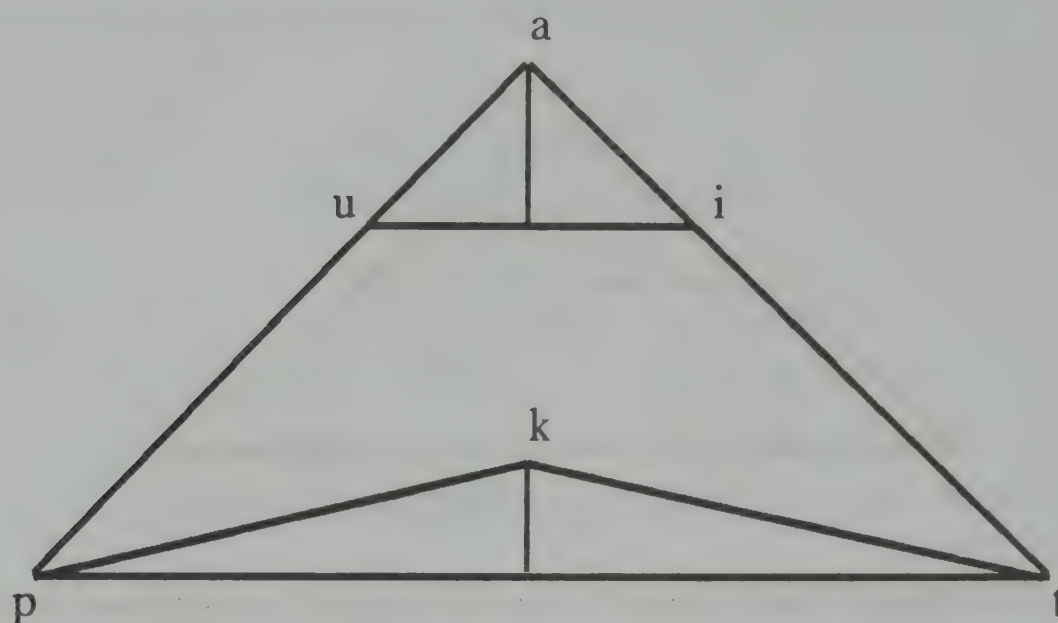
These three vowels /a, i, u/ are said to constitute the basic three-vowel pattern in phonological literature (Schane 1973: 10).⁴

On the consonants side, /p/ and /t/ both are articulated in the front part of the oral tract. Therefore, the next consonant to appear in

3. The diagrams of second and third stages are taken from Ferguson and Garnica (1975: 165).

4. Though Shvachkin, like Jakobson, states that /a/ is the first vowel to emerge and '... /a/, /i/ and /u/ are considered to be the oldest vowels' (110), he has certain points of departure from Jakobson too. Jakobson argues that children follow the principles of 'maximal contrast'. But Shvachkin observes that '... vowels are phonemically discriminated earlier than consonants.' (105); or, in other words, vowels are discriminated in the first phonemic stage and consonants in the second one.

children's speech is the velar stop /k/ which being a back consonant is maximally opposed to the front ones. This stage in the phonological development has been represented in a diagram in Jakobson and Halle (1971: 53) as follows:



It is important to note that neither Jakobson (1968) nor Jakobson and Halle (1971) have said anything about the ranking of other vowels and consonants.

After Jakobson, it is Crothers (1978) who on the basis of Greenberg's (1966) frequency-counts has provided further evidence that the ranking of the vowels /a, i, u/ is correct and that it is a universal phenomenon. He, of course, has not elaborated it; nor, like Jakobson, has tried to rank other vowels. Rather he has clearly stated that in a five-vowel system both /ε/ and /O/ are 'predicted, but not ranked' (Crothers 1978: 134).

2. Scope of the Present Paper

We just discussed the incomplete ranking of vowels and consonants by Jakobson and others. While closely observing the development of language in the subjects of this study, a sequential order was noticed in the emergence of vowels as well as consonants which corresponds to Jakobson's ranking of vowels but differs from that of consonants. Therefore, this paper aims at the following by taking the order of acquisition of Oriya vowels and consonants by the subjects concerned along with other evidence such as sound change, frequency counts, etc. into consideration:

- (i) to build up a hierarchy of vowels;
- (ii) to revise Jakobson’s hierarchy of consonants, and propose another in its place; and
- (iii) to see if the vowels and consonants acquired by the subjects share any common features and thus, if possible, to try to determine a general phonological hierarchy irrespective of vowels and consonants.

3. Background of the Subjects

The subjects of the study are Puplu and Lublu, my sons, who were born and brought up in an educated and Modern Standard Oriya (M.S.O.) speaking family. As they have very rarely moved out of the Modern Standard Oriya speaking area, it can be said that they are not exposed to other varieties of Oriya excepting the standard one.

4. Collection of Data

The data were collected from both the subjects from the day they spoke their first words to 4;0 in the case of Puplu and 3;3 in the case of Lublu. These data consist primarily of spontaneous utterances spoken by the subjects in different speech situations and were taken down regularly and systematically.

5. Phonemic Inventory of Oriya

First, let us look at the phonemic inventory of Modern Standard Oriya. It has the following six vowel phonemes:

Vowel	Phonemes
i	u
e	o
--	ɔ
	a

Out of these vowels only the occurrence of /o/ is very much restricted. It changes to /ɔ/ in the initial syllables of some words like the following:

mote	→	mɔte	‘to me’
tote	→	tɔte	‘to you’
konɔ	→	kɔnɔ	‘corner’

It can be seen being frequently replaced by either /u/ or /ɔ/ word medially. For example:

daroga	→	daruga	‘a police officer’
pɔkɔri	→	pɔkuri	‘small globules of gram-flour mixed with water, made into paste and fried in oil.’
aboriba	→	aburiba	‘to surround’
bhugɔɪɔ	→	bhugɔɪɔ	‘geography’
pɔrokhyɔ	→	pɔrɔkhyɔ	‘indirect’
bɔndɔbɔstɔ	→	bɔndɔbɔstɔ	‘arrangement’

It never occurs in the word-final position except in a couple to vocatives, i.e. [ho], [lo], etc. The following thirty consonant phonemes are there in Modern Standard Oriya.

Consonant Phonemes

p	t	ɽ	c	k
ph	th	ɽh	ch	kh
b	d	ɽ	j	g
bh	dh	ɽh	jh	gh
m	n	ɳ		
	s			h
	l	ɭ		
	r			
w			y	

Among all these, only /ɽ/ and /ɽh/ each has an allophone such as [ɽ̤] and [ɽ̤h] respectively. These allophones occur only in intervocalic environments within either a morpheme or a formative (For a detailed discussion on it see Mohanty (2000)).

5.1. Markedness and Phonological Hierarchy

Markedness theory recognizes at least four clues to determine which segments are less marked than other. They are (i) language

acquisition, (ii) language loss, (iii) context-free language change and (iv) frequency of occurrence. This means firstly, those segments which are acquired earlier by children and secondly those which are trained in the speech of aphasics till the last stage are less marked than others. Thirdly, if there is no contextual pressure, the tendency of all kinds of sound changes is from the marked to the unmarked. Fourthly, the unmarked segments are much more frequently attested than the marked ones in languages. In this paper we will be primarily concerned with language acquisition and give instances of context-free language change and frequency of the occurrences of segments of strengthen our claims.

5. Analysis of the Data

After /a/, the second vowel Puplu spoke was /i/ as in [didi] (M.S.O. /dudhɔ/, baby-talk /didi/) ‘milk’, [gai] (M.S.O. /gai/ ‘cow’. /u/ emerged in his speech a few days later; for example [u] (baby-talk /hu/) ‘anything frightening, like insects, fire, etc.’ [abu] (M.S.O. /alu/) ‘potato’. Besides these, when he was 1;8 there were almost ninety words in his verbal repertoire. When I counted the frequency of occurrences of /i/ and /u/ in these words, it was found that the former occurred forty-six times whereas the latter only ten times. Another interesting phenomenon that was observed in Puplu’s speech at that time is replacement of /u/ by /i/. That is he tended to naturalize adult utterances by substituting /i/ for /u/.

M.S.O.	Puplu’s speech	Gloss
gua	gia	‘betel-nut’
cura	cia	‘flattened rice’
gurɔ	gia	‘molasses’
jauci	jaici	‘(I) am going’
au	ai	‘more’
myãũ	maĩ	‘cat’
thekua	thekhia	‘rabbit’
upɔrɔku	ipu	‘to the top’
kakuri	kaki	‘cucumber’
munni	mini	‘Munny’ (a girl’s name)

There were instances, though very rare, of substitution of /i/ for /o/ also.⁵

M.S.O.	Puplu's speech	Gloss
oda	ida	'wet'

But he did not speak a single word in which /i/ changed to /u/. In order to test the regularity of this change, once I asked him to reproduce the following three words: Rina, Rini and Rinu, one after another in three instalments, and each time he was found saying [nina], [nini] and [nini] respectively. Notice that in the place of the expected response [ninu] 'Rinu' his response was [nini].

There are other pieces of evidence to support this claim. Smith (1973) has given a long list of words his son spoke in 29 phases up to 4;0. The occurrences of /i, e, ε, u, o, ɔ/ in the words the child used in stage I and the results fully conform to the present predictions.⁶ In these data /i/ occurs 60 times whereas /u/, 31 times; /e/ occurs 5 times whereas /o/, 2 times; /ε/ occurs 35 times whereas /ɔ/, 23 times. If we consider the frequency of occurrences of /i:, e:, ε:, u:, o:, ɔ:/ along with /i, e, ε, u, o, ɔ/ we would see that /i, i:/ occur 106 times whereas /u, u:/, 58 times, /e, e:/ occur 12 times whereas /o, o:/, 3 times, and /ε, ε:/ occur 36 times whereas /ɔ, ɔ:/, 35 times. These statistics show that the front vowels are more frequent than their back counterparts.

Greenberg (1966: 18-19), in order to determine the marked character of long vowels against the short ones, presents the frequency of each the vowels, i.e. /i, e, a, o, u/ in seven different languages, viz. Icelandic, Sanskrit, Czech, Hungarian, Finnish, Korok and Chiricahua. Interestingly, Greenberg's data prove the point under consideration too. I would consider the data given from the first six languages only and not from Chiricahua which, seems to be erratic; because it apparently violates the implicational universal by having /o/, but no /u/.

5. In the dialects of Oriya, change of /o/ to /u/ is very common. The following examples from the northern dialect are illustrative:

oda → uda 'wet'
corɔ → curɔ 'thief'

6. Greenberg's data show that Korok has only /e:/ and /o:/, but no /e/ and /o/. So the frequency of /e:/ and /o:/ has been given here.

The frequencies of /a, i, u/ in the aforementioned six languages can be tabulated as follows:

Table I

	<i>Icelandic</i>	<i>Sanskrit</i>	<i>Czech</i>	<i>Hungarian</i>	<i>Finnish</i>	<i>Korok</i>
a	9.724	19.78	6.83	22.48	21.4	40.3
i	7.028	5.85	6.49	9.30	23.7	20.6
u	4.336	2.61	3.07	2.63	7.9	19.1

Besides these, there are some Straits Salish dialects, like Saanich and Songish that do not have /u/ at all. The vowels that occur in these dialects are /a, i, e/. So Sloat, Taylor, and Hoard (1978: 106) conclude, ‘Both [u] and [e], then imply [i] ...’.

From the order of acquisition by Puplu and Lublu, Table I, and the discussion in Sloat, Taylor, and Hoard (1978) it is clear that after the most unmarked vowel /a/, /i/, and /u/ come second and third respectively in the hierarchy of vowels. Now the next step is to see which one between /e/ and /o/ is less marked than the other. Greenberg’s frequency-counts go in favour of /e/ as will be clear from the table below.

Table II

	<i>Icelandic</i>	<i>Sanskrit</i>	<i>Czech</i>	<i>Hungarian</i>	<i>Finnish</i>	<i>Korok</i> ⁷
e	5.728	2.84	9.40	22.64	16.7	3.2
o	1.488	1.88	8.24	11.00	11.3	2.1

Before discussing whether /e/ or /o/ emerged first in the speech of Puplu and Lublu, the position of /o/ in Oriya should be made clear. It has earlier been said that /o/ is used under certain restrictions in Modern Standard Oriya. If we consider different dialects of Oriya it would be seen that the northern dialect does not have this sound at all, and its occurrence is very much restricted in the western as well as the southern dialects. The cause of this restriction on /o/ is ‘economy’

7. Srivastava (1974) has reported the same order in the speech of the Hindi-speaking child he studied.

(Mohanty 1997). From the vowel-chart of Oriya given in the beginning of this paper, it can be noticed that /ɔ/ does not have a front counterpart and thus, a pattern-gap has been created. The functional load between /o/ and /ɔ/ in Oriya is also very low. So for the sake of economy, /o/ has disappeared in the northern dialect, and is in the process of disappearance in other dialects including the standard variety. In other words, Oriya looks to be heading towards a five-vowel system in the place of the present six-vowel system. On the top of these, both Puplu and Lublu spoke /ɔ/ much before /o/.

Again /e/ is found being converted into /ɔ/ in certain environments in Oriya. For example:

de + ba → dɔba 'to give'
ne + ba → nɔba 'to take'

This change clearly indicates that /e/ and /ɔ/ belong to one natural class.

For these reasons, /ɔ/ is taken as the immediate back counterpart of /e/ in this paper. In the speeches of both the subjects /e/ emerged earlier. Puplu used /ɔ/ at 1;5 in words like [diɔ] (M.S.O. /diɔ/) 'give', [niɔ] (M.S.O. /niɔ/) 'take', [piɔ] (M.S.O. /puɔ/) 'boy'. But before all these he was using words like [ei] (M.S.O. /ei/) 'this', [de] (M.S.O. /de/) 'give' (non-honorific), [ne] (M.S.O. /ne/) 'take' (non-honorific). Lublu, like Puplu, also spoke words having /e/ before those having /o/. At 1;2, he started speaking [kie ~ ke] (M.S.O. /kie/) 'who' and then many more words like, [ile] (M.S.O. /ire/) (a word of interjection), [eitɔ] (M.S.O. /eitɔ/) 'it is here', [emā] (M.S.O. /ema/) (a word of interjection that literally means 'O, mother!'), [de] (M.S.O. /de/) 'give' (non-honorific) and [ne] (M.S.O. /ne/) 'take' (non-honorific). But /ɔ/ was found in his speech only in one word [kɔ] (M.S.O. /kɔnɔ/) 'what' at 1;3 and some other words with /ɔ/ emerged after 1;4. For example, [kɔkɔ] (M.S.O. /kukurɔ/, baby-talk /kɔkɔ/) 'dog', [gɔla] (M.S.O. /gɔla/) 'went away', [dɔ:] (M.S.O. /dhɔ/ 'hold').

Puplu could pronounce /o/ only at 2;4 in words like [boli] (M.S.O. /boli/) (an NP complementizer), [lochei] (M.S.O. /rosci/) 'cooking', [jogec] (M.S.O. /joges/) 'Jogesh' (a boy's name). This sound emerged in Lublu's speech at 2;6.

Furthermore, the occurrence of /ɔ/ (not to speak of /o/) was very much restricted in their speech whereas no such restriction was there on /e/. Let us take examples from Puplu’s speech. Through /e/ occurred in the initial as well as non-initial syllables, /ɔ/ occurred only in the non-initial syllables in his speech. In the initial syllables it was always replaced by /a/. For example:

ɔpa	→	apa	‘elder sister’
dɔhi	→	dai	‘curd’
ɔnda	→	ada	‘egg’

All these make it clear that /e/ is less marked than its back counterpart; whether the latter is /o/ or /ɔ/ is immaterial.

Before going over to consonants, let us state briefly what has been discussed above. We saw that /i/ is less marked than the back vowel /u/, and /e/, than its back counterpart /o/ or /ɔ/. The neutral vowel /a/ has the features

+ back.
- round.

It should be mentioned here that the feature [-round] is generally accepted as a feature of [-back] vowels, i.e. /i, e, ɔ/. Thus, /a/ combines the features of both the [+back] as well as the [-back] vowels. In other words, it has the potentials to become a member of either group. For this reason, the position of /a/ depends on the number of vowels a particular language has, and it can be accepted as a low vowel in the front series or in the back series or as a low central vowel for the sake of symmetry in the vowel systems of languages. For example, it is included in the front series in a four-vowel system as in Adzera (Crothers 1978: 139).

i	u
a	o

But it is included in the back series in a four-vowel system as in Moxo (Crothers 1978: 138).

i	u
ɛ	a

It may also be treated as a central vowel in a five-vowel system like that of the northern dialect of Oriya (Mohanty 1987).

i	u
e	ɔ
a	

For this reason, /a/ has been accepted as the neutral vowel and it comes first in the hierarchy of speech-sounds in general, and vowels in particular. After this most unmarked vowel, as it is clear from the above paragraphs, the [-back] or front vowels are less marked than the [+back] vowels. But Jakobson (1971: 10) claims that the first consonant to originate in child language is a stop which is articulated at the front part of the mouth and is usually a labial stop. Jakobson and Halle (1971: 50) further observe that generally child language begins and aphasic patients end with 'what psychopathologists have termed the 'labial stage'.' Therefore, Jakobson's claim is that labials are the most unmarked among all consonants. He argues, 'the phonological sequence of stages, however, is rigorously consistent. It follows the principle of maximal contrast' (Jakobson 1971: 14). According to him, in opposition to the maximally open vowel /a/, it is a labial which emerge as the first consonant, because only such a consonant obstructs the oral tract completely (Jakobson 1971: 14).

The author did not get any chance to check whether labials are the last consonants retained in aphasics speech or not; but so far as language acquisition is concerned, Jakobson's statement does not seem to be acceptable. Contrary to Jakobson's claim, dental originated earlier than labials in Lublu's speech. He first started speaking [tata] 'tata' at 0; 11, [tai ~ dai] (M.S.O. /dɔhi/) 'curd' at 1;0, and [papa] (M.S.O. /papa/) 'father', [māmā] (M.S.O. /mama/ 'mother' emerged later, i.e. at 1;1. Words having the velar stop /k/, i.e. [ke] (M.S.O. /kie/) 'who'. [kɔ̃] (M.S.O. /kɔ̃ɔ̃/) 'what' were found in his speech still later, i.e. at 1;2. From this sequential emergence of consonants, it is clear that dentals can also come first and not strictly labials as has been claimed by Jakobson. After dentals, of course, labials come second and velars, third in the hierarchy of consonants.

Frequency-counts also invalidate Jakobson's hypothesis and provide evidence in favour of our claim. First, let us consider Puplu's

data. At 1;8, he had most probably ninety words in his repertoire and in all these words there were sixty-four syllables which had dental stops and only forty-two had labial stops.

Again we can use Greenberg's (1966: 16-17) data to strengthen the above observation. In order to show that glottalic consonants are more marked than their non-glottalic counterparts he gave data from languages like Hausa, Klamath, Coos, Yurok, Chiricahua and Maidu. Out of these languages, there are no data about the frequency of glottalized and non-glottalized labials in Chiricahua. So it will not be considered here. Greenberg (1966: 20) further gave data from Russian to show that palatalized consonants are more marked than their unpalatalized counterparts. We can utilize his statistics about the occurrences of labials and dentals to prove that dentals can be shown to be less marked than labials. This comparative statement between the frequencies of labials and dentals in the above-mentioned languages has been given in the following tables:

Table III

	<i>Klamath</i>	<i>Coos</i>	<i>Yurok</i>	<i>Maidu</i>	<i>Russian</i>
p	2.8	2.9	8.9	9.3	23.090
t	7.6	23.9	14.3	19.6	42.660

Table IV

	<i>Russian</i>	<i>Hausa</i>
b	10.960	17.0
d	16.650	19.8

These tables substantiate that dentals can be less marked than labials.

Though Chomsky and Halle (1968) do not clearly say whether labials or dentals are less marked, their statement that /p, t, k, s, n/ are the five consonants which are 'rarely absent in the phonological system of a language' (Ibid.: 413) make it evident that dentals are less marked than labials. Because according to this statement besides dentals stops, the dental (or alveolar) fricative and the dental nasal are found in

almost all languages whereas the labial fricative and the labial nasal are not.

There are many more pieces of evidence to further support our claim. When I counted the occurrences of labials and dentals in the words spoken by Smith’s son in stage I (Smith 1973), the following results were found: /t/ occurred 39 times against 13 occurrences of /p/, and /n/ occurred 49 times against 28 occurrences of /m/. Only /b/ occurred 24 times whereas /d/, a bit less than that, that is 21 times. However, in total, dentals occurred 109 times whereas labials, only 65 times. Again, Greenberg (1978a: 268) having studied the initial and final consonant clusters in as many as 104 languages concludes, ‘there is some evidence for the dominance of the dental-alveolar region over the labial and the palatal-velar.’ He formulates two laws such as, (i) every language which has initial consonant clusters contains at least one cluster with a dental-alveolar consonant in the initial position, and (ii) every language which has final consonant clusters contains at least one cluster with a dental-alveolar obstruent in the final position (Greenberg 1978a: 268-269).

On the basis of his study of occurrences of stops in different languages, Gramkrelidze (1978: 16) reports, ‘the dental group is opposed to the labial and velar groups as that group which has the greatest general frequency of occurrence; it is thereby characterized as unmarked with respect to the two other groups.’

Ferguson (1963: 56-57) after a sample study of the occurrences of nasals in different languages, concludes that the presence of a labial nasal in a language presupposes the presence of a dental-alveolar nasal, but not vice-versa. Chomsky and Halle (1968: 412-3) state that if a language has only one fricative it is invariably [s]. Schane (1973: 113) also supports Chomsky and Halle’s statement.

Now let us consider the position of /p/ and /t/ in a consonant hierarchy from the markedness point of view. Schane (1973: 113) applies the values of two consonant features [anterior] and [coronal] to stops like /p, t, c, k/ and the result table is as follows:

Table V				
	p	t	c	k
anterior	U	U	M	M
coronal	M	U	M	U
	1	0	2	1

This table shows that /t/ is the most unmarked with complexity zero, /c/ is the most marked with complexity 2, and /p, k/ have intermediate complexity, i.e. 1, though Table-V cannot say which one between /p/ and /k/ is less marked than the other, it undoubtedly makes clear that between /p/ and /t/ the latter is less marked.

However, on the basis of the above facts it can be concluded that Jakobson's claim about the least marked character of /p/ is too strong. Rather, it will be more reasonable to treat both /p/ and /t/ as the least marked among all consonants, and a choice between them should be considered as a language specific phenomenon. Chomsky and Halle (1969: 412) seem to support this view; because they do not make any effort to determine which one between /p/ and /t/ is less marked than the other. According to them both /p/ and /t/ have the same degree of complexity, i.e. 1.

Jakobson's argument concerning the unmarkedness of /p/ with respect to /t/ has also some inherent problem within itself. He has argued that labials are least marked as they close the oral tract. If his principle of 'maximal contrast' is applied then it should be the uvular stops, which are still more back than velars, to emerge earlier than velars. But most of the languages in the world do not even have a uvular stop, whereas almost all of them have velars. This indicates that tongue plays a vital role in determining the sequence of the emergence of sounds. If this is correct, then there would not be any hitch to accepting /t/ as less marked than /p/, in the production of which the tongue does not participate at all.

It has been mentioned earlier that besides labials, dentals and velars, Oriya also has palatal and retroflex consonants. So the question that arises here is which of the palatal and retroflex consonants are more basic or less marked than the other.

Puplu and Lublu both used dentals in place of palatals and retroflexes in adult words. Let us take some examples from Puplu's speech when he was 1;8.

M.S.O.	Puplu's speech	Gloss
it̪a	ita	'brick'
cit̪hi	titi	'letter'

bɔdɔ	bɔdɔ	'big'
baja	bada	'any musical instrument'
jhitipiti	ditipiti	'lizard'

Notice here that /t/ replaces the voiceless phonemes whereas /d/ replaces the voiced ones. This means the dentals are split into palatals and retroflexes at a latter stage of the child. This was observed in the case of both Puplu and Lublu.

At the age of 1; 10-11 Puplu started using the palatal sounds /c, ch, j, jh/, e.g. [cɔti] (M.S.O. /cɔti/) 'shoes', [bɔchibi] (M.S.O. /bɔsibi/) '(I) will sit', [bhɔja] (M.S.O. /bhɔja/) 'fried', [jhiɔ] (M.S.O. /jhiɔ/ 'girl', etc. The retroflex sounds emerged much later at the age of 2;3 in words like [kaɔɔ] (M.S.O. verb-root /kaɔ-/ 'to pain') 'pain', [pɔɔrithantu] (M.S.O. verb-root /pɔɔr-/ 'to fall') '(I) would have fallen', etc. It clearly indicates that palatals are less marked than retroflexes. In consonance with this, we see that there are many languages such as Latin, Greek, English, French, German, Russian which do not have retroflex consonants, but which have palatal consonants.

The aspirated stops appeared a few weeks before the palatals in the speech of the subjects. At 1;9, Puplu started using aspirated dentals in words like [thia] (M.S.O. /thia/) 'standing', [bithu] (M.S.O. /bhitɔrɔku/) 'to inside', [dhɔli] (M.S.O. /dhɔribi/) '(I) will hold'. Aspirated labials, velars, and palatals emerged in this order slightly later in his speech, i.e. at 1;10 in words like [phakha] (M.S.O. /pɔnkha/) 'fan', [dekha] (M.S.O. /dekha/) '(you) show', [ghɔle] (M.S.O. /ghɔre/) 'at home', [ɔchi] (M.S.O. /ɔchi/ 'is', [chuibi] (M.S.O. /soibi/) '(I) will sleep'. Aspirated retroflex stops emerged still later at 2;10 in his speech, e.g. [thia] (M.S.O. /thia/) 'standing', [sarhi] (M.S.O. /sarhi/) 'sari'. The point to be noted here is that voiceless aspirates appeared earlier than their voiced counterparts. For example, [th] appeared before [dh] and [kh], before [gh]. At this point, i.e. when Puplu was using [th, dh, kh, dh], only [ph] and [ch] were there; [bh] and [jh] developed a few days later. At 1;10-11, he started using words like [bhaghɔ] (M.S.O. /baghɔ/) 'tiger', [bhɔlɔ] (M.S.O. /bhɔlɔ/) 'good', and [jhiɔ] (M.S.O. /jhiɔ/) 'girl'.

Out of the three nasal phonemes of M.S.O. i.e. /m, n, ŋ/, /m/ appeared first at 1;1 in Puplu's speech in the word [māmā] (M.S.O.

/mama/) ‘mother’. Then /n/ emerged in his speech at 1;5 in the word [nĩɔ̃] (M.S.O. /niɔ̃/) ‘(you) take’. The retroflex nasal /ɳ/ appeared much later at 2;4 in the word [paɳi] (M.S.O. /paɳi/ ‘water’.

M.S.O. has two fricatives, i.e. /s/ and /h/. Both these fricatives originated in Puplu’s speech at 2;4 in the above order in words like [bɔs] (M.S.O. /bɔs/) ‘bus’, [khus] (M.S.O. /khusi/) ‘happy’, and [huɔ] (M.S.O. /huɔ/) ‘(you) become’.

Between the two laterals of M.S.O., i.e. /l/ and /ɭ/, the former emerged in Puplu’s speech when he was 1;6 in words like [gɔla] (M.S.O. /gɔla/) ‘(he) went’, [kalɔ] (M.S.O. /kaharɔ/) ‘whose’: and /ɭ/ emerged at 2;9 in the word [baɭɔ] (M.S.O. /baɭɔ/ ‘hair’. The same order was observed in case of Lublu also. Besides this, it has been reported that most languages often have only dental-alveolar liquids (Schane 1973: 113). The only trill of M.S.O., i.e. /r/ was noticed in Puplu’s speech at 2;1 when he used words like [ghɔrɔ] (M.S.O. /ghɔrɔ/) ‘house’, [dhɔruni] (M.S.O. /dhɔriparuni/) ‘(I) cannot hold’. The developmental sequence of all the above mentioned Oriya vowels and consonants can be presented in the following table:

Table VI

<i>Sl. No.</i>	<i>Speech sound</i>	<i>Age</i>
1.	a	0.11
2.	i	1.0
3.	u	1.1
4.	e	1.2 (Lublu) 1.3 (Puplu)
5.	ɔ	1.3 (Lublu) 1.5 (Puplu)
6.	o	2.4 (Puplu) 2.6 (Lublu)
7.	t	0.11
8.	d	1.0
9.	p	1.1

10.	b	1.1
11.	m	1.1
12.	k	1.2
13.	n	1.5
14.	l	1.6
15.	th	1.9
16.	dh	1.9
17.	c	1.10
18.	ph	1.10
19.	kh	1.10
20.	ch	1.10
21.	bh	1.11
22.	gh	1.11
23.	j	1.11
24.	jh	1.11
25.	r	2.1
26.	ṭ,	2.3
27.	ṛ (/ḍ/)	2.3
28.	ṇ	2.4
29.	s	2.4
30.	h	2.4
31.	ḷ	2.9
32.	ṭh	2.10
33.	ṛh (/ḍh/)	2.10

From the above data, it is evident that /p/ and /t/ are less marked than /k/, /c/ and /ṭ/; /m/ and /n/ are less marked than /ṇ/; /s/ is less marked than /h/; and /l/ is less marked than /ḷ/. Now the problem is to determine the characteristic feature common to /p/, /t/, /m/, /n/, /s/ and /l/ that makes these emerge earlier in child language, and less marked than /k, c, ṭ, ṇ, h, ḷ/. Notice that /p/ and /t/ are front consonants, and /l/

being articulated in the dental-alveolar region is also a front lateral with respect to /l/ which is articulated in the hard palate region. So the common feature shared by /p, t, m, n, s, l/ is 'frontness'. But there is no such feature in the literature of phonology. It seems, therefore, to postulate a feature [front] in order to account for the early emergence of /p, t, m, n, s, l/ rather than /k, c, ʈ, ɳ, ʅ/. Again the addition of this feature will explain why after /p, t/, the third consonants to emerge of /p, t/ and /k/; because /p, t/ are [+front], /k/ is [+back], and /c, ʈ/ come in between or, in other words, are [-front] and [-back].

6. Explanation

A pertinent question may be raised here: Why are the [+front] sounds less marked than the [-front] ones? As rightly pointed out by Martinet (1952: 26-27), Anttila (1972: 186) and Bühn (1980) its cause is the inherent asymmetry present in the speech organs themselves: (1) The front part of the mouth (viz. the musculature of the lips, jaw, and front portion of the tongue) probably develops earlier and faster than the back part. (2) There is more room in the front area than the back area of the oral cavity. (3) The front part of the tongue is more dynamic and flexible than its back counterpart. As a result it is naturally easier to produce the [+front] sounds, and for this reason they are less marked than others.

7. Conclusion

To sum up, the main points discussed in this paper are as follows: [+front] vowels are less marked than [-front] ones and [+front] consonants are less marked than their [-front] counterparts. So it can be concluded that [+front] sounds are more basic and less marked than [+back] as well as [-front] ones because of the inherent asymmetry among the speech organs themselves. Further, a feature like [front] has to be postulated to account for the early emergence of certain sounds over others.

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BIBLIOGRAPHY

Anttila, R. 1972. *An Introduction to Historical and Comparative Linguistics*. New York: MacMillan.

Lust, B. 2006. *Child Language: Acquisition and Growth*. Cambridge: Cambridge University Press.

Brown, R. 1973. *A First Language: The Early Stages*. London: George Allen & Unwin.

Bühler, R.D. 1980. The Emergence of Vowels in an Infant. *Journal of Speech and Hearing Research* 23. Pp. 73-94.

Chomsky, N. & Halle, M. 1968. *The Sound Pattern of English*. New York: Harper and Row.

Crothers, J. 1978. Typology and Universals of Vowel Systems in Greenberg (Ed.) 1978b.

Ferguson, C.A. 1963. Assumptions about Nasals: A Sample Study of Phonological Universals in J.H. Greenberg (Ed.), *Universals of Language*. Cambridge: M.I.T. Press.

---- & Garnica, Olga K. 1975. Theories of Phonological Development in H. Lenneberg & E. Lenneberg (Eds.), *Foundations of Language Development: A Multidisciplinary Approach* (Vol. 1). Academic Press.

Garnica, O.K. 1973. The Development of Phonemic Speech Perception in T.E. Moore (Ed.), *Cognitive Development and the Acquisition of Language*. New York: Academic Press.

Gramkrelidze, T.V. 1978. On the Correlation of Stops and Fricatives in a Phonological System in Greenberg (Ed.) 1978b.

Greenberg, J.H. 1966. *Language Universals*. The Hague, Paris: Mouton.

----. 1978a. Some Generalizations Concerning Initial and Final Consonant Clusters in Greenberg (Ed.) 1978b.

---- (Ed.). 1978b. *Universals of Human Language* (Vol. 2, Phonology). Stanford, California: Stanford University Press.

Jakobson, R. 1968. *Child Language, Aphasia and Phonological Universals*. The Hague: Mouton.

---- & Halle, M. 1971, (1956). *Fundamentals of Language*. The Hague, Paris: Mouton.

Kent, R.D. & H.R. Bauer. 1985. Vocalizations of One-year-Olds. *Journal of Child Language* 12. Pp. 491-526.

Ladefoged, P. 1975. *A Course in Phonetics*. New York: Harcourt Brace & Jovanovich.

Martinet, A. 1952. Function, Structure, and Sound Change. *Word* 8:1. Pp. 1-32.

Mohanty, P. 1987. Where Did /o/ Go in the Northern Dialect of Oriya? *Indian Linguistics* 48. Pp. 76-86.

----. 1997. Linguistic Economy at Work: An Example from Oriya. *International Journal of Dravidian Linguistics* XXVI:1. Pp. 89-96.

----. 2000. On Sonorisation in Oriya. *Indian Journal of Linguistics* 19. Pp. 12-22.

Oller, D.K., L.A. Wieman, W.J. Doyle & C. Ross. 1976. Infant Babbling and Speech. *Journal of Child Language* 3. Pp. 1-11.

Schane, S.A. 1973. *Generative Phonology*. Englewood Cliffs, New Jersey: Prentice-Hall.

Shvachkin, N. Kh. 1973. The Development of Phonemic Speech Perception in Early Childhood in C.A. Ferguson & D.I. Slobin (Eds.), *Studies of Child Language Development*. New York: Holt, Rinehart & Winston.

Sloat, C., Taylor, S. & Hoard, J.E. 1978. *Introduction of Phonology*. Englewood Cliffs, New Jersey: Prentice-Hall.

Smith, N.V. 1973. *The Acquisition of Phonology: A Case Study*. London: Cambridge University Press.

Srivastava, G.P. 1974. A Child's Acquisition of Hindi Consonants. *Indian Linguistics* 35. Pp. 112-118.

Vihman, M.M., M.A. Macken, R. Miller, H. Simmons & J. Miller. 1985. From Babbling to Speech: A Reassessment of the Continuity Issue. *Language* 61. Pp. 397-445.

Werker, J.F. & R.C. Tees. 1984. Cross-Language Speech Perception: Evidence for Perceptual Reorganization during First Year of Life. *Infant Behaviour and Development* 7. Pp. 49-63.

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DRAVIDIAN AND ALTAIC - ANCIENT HIGH-CONTACT LANGUAGES?¹

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Abstract

This paper draws general conclusions about the implications of the parallels found between Dravidian and Altaic. In the margin it also offers several important parallels concerning the 'chieftain' or 'king' and a few words referring to the related 'instruments of power'. The parallels established so far (see the references below) are too numerous to be only results of mere coincidence. But at the same time there are important gaps (no parallel numerals or pronouns) on the one hand, and on the other hand we encounter a great variation of forms, irregularities in the phonetic correspondences and numerous doublets in all the languages concerned. These 'symptoms' are a clear indication that we have to do not with a language family but with an ancient contact between languages with all that this entails. It was obviously a 'high contact'. The question of when and where this contact took place remains open and though there are some hypothetical implications pointing to the 1st half of the 1st Millennium B.C. on (South) Indian soil, this hypothesis will have to be checked against many more linguistic, archaeological and anthropological data.

1. This paper is a summary of the main ideas of a more extensive presentation at the 37th All India Conference of Dravidian Linguists, International School of Dravidian Linguistics and Dravidian Linguistic Association, June 18-20, 2009. A shorter Russian version was presented at the International conference on Mongolian and Altaic studies at the Kalmyk State University in Elista (Russia) on November 11, 2009 (cf. Vacek 2009c). This topic was further discussed in greater detail including also the various Dravidian synonyms of the individual lexemes (cf. Vacek 2009f).

1. Introduction

The Dravidian and Altaic parallels were discussed in my earlier papers over the last thirty years. In the last 150 years the relationship of Dravidian and Altaic has been proposed by several scholars. Some examples were mentioned already by R. Caldwell in 1850 and later the subject was raised by P. Meile (1949) and K. Bouda (as Uralaltaic - 1953, 1956). The problem has also been studied in some greater detail by K.H. Menges (esp. 1964, 1977). However, Altaic is not the only language family compared with Dravidian. Apart from Bouda, Dravidian and Uralian was discussed very early by F.O. Schrader (1925) and later also by Th. Burrow (1943), M.S. Andronov (1968) and S.A. Tyler (1968). Also to be mentioned are the suggestions concerning a relationship with Elamite (McAlpin 1981) on the one hand, and Korean (Hulbert 1906, Clippinger 1984) and Japanese (Ohno 1980) on the other. The various trends in the long-range comparison of Dravidian with other language families were summed up by Zvelebil (1991 with further references). There are also studies on the parallels with Australian languages (Blažek 2006, 2007), which may be complementary to some of the above comparisons with Eurasia (see below).

In my previous papers (see the list at the end of the paper) I have underlined several times that this type of parallels cannot or need not necessarily be interpreted as a reflection of a language family. There are a relatively great number of lexical parallels and only some morphological parallels including the resulting phonetic parallels, however, with a rather high rate of variation and also important lacunae - no numerals, no personal pronouns. However, there are many irregular correspondences due to a number of lexical doublets on both sides, which have to be accounted for.²

The lexical parallels include words from the basic vocabulary, in particular verbs and nouns referring to the immediately surrounding

2. Particularly if we should think in the 'Young Grammarian' manner. In fact the phonetic correspondences display a 'regularity' of a different order, which I have called a continuum of forms which can be best grasped by way of models (cf. particularly Vacek 2002a). For a summary of the basic phonetic correspondences cf. e.g. Vacek (2002a, 2004b and also 2009a).

natural environment, to parts of the body, kinship terms and some general concepts.³ Particularly important are the parallel verbs (the VC- / CVC- root), which further display another substantial parallel morphological feature immediately after the root or stem - the original verbal noun suffixes, which ultimately developed into temporal suffixes. They correspond both in form and function to the same morphemes in Mongolian and partly also in Turkic (cf. Vacek 1977, 1978). Besides that there are suffixes, which could be called 'stem extensions' in both Dravidian and Altaic and which constitute verbal stems of two syllables (for more details cf. e.g. Vacek 2009a with further references).

All these 'symptoms', the combination of regularity with irregularity, and in particular the significant lacunae in the lexical parallels, actually point in the direction of an ancient linguistic area (whose time and space are still to be specified more precisely in the course of the further investigation of this topic; cf. also Hook 1987; Masica 1976).

At a very early stage in the comparative work I gave up the possibility of reconstruction of the individual lexical parallels (on reconstruction cf. also Birnbaum 1977; Schwink 1994). It was only very slowly that I arrived at the idea of models, which can be applied especially to verbs, but also to some nouns, having a wide range of phonetic variation. Some of the models can be more complicated, including the problem of semantics (cf. Vacek 2002a).

As for the missing personal pronouns and the numerals there is one hypothetical possibility that these lexical classes are related to the Australian languages (Blažek 2006, 2007) and could thus represent a residuum of the original linguistic structure (cf. also the proposal below concerning 'layers' in Dravidian).

In this paper I will add a few lexical parallels from the above-specified sphere. I will show by a sample of lexemes from this

3. The majority of etymologies discussed in my papers include the verbs (Vacek 2004b, Nos. 4-14; cf. also Vacek 1983, 1992b, 1994, 1996b, 2003, 2004c, 2005a, 2005b, 2006b, 2006d, 2007b, 2007c, 2008a), particularly those of the basic lexicon, and also nouns from the basic lexicon - concerning the body (Vacek 2005c, 2006c, 2007a, 2008b), immediate nature (No. 3 above; Vacek 2001a, 2001b, 2002a), some animals (Vacek 2002c, 2004a) and kinship terms (Vacek 2004b, Nos. 2, 3; cf. also Vacek, Lubsangdorji 1994).

semantic field that the situation in Dravidian in fact corresponds to the possibility of an ancient language contact. The contact had to be very intimate. It could have allowed a significant amount of borrowing on the one hand, but it also preserved parallel synonyms in the Dravidian languages. The implication of the relatively great phonetic closeness, which is easily perceivable, would seem to be that the time of the contact should not be projected onto an excessively remote past. Judging from the other indications (a relatively small number of Dravidian borrowings in the Rgveda for which I cannot identify any Altaic parallels; a great number of Munda borrowings including personal names; cf. Witzel, Kuiper), the presumed contact of Altaic migrants(?) with the indigenous ('pre-Altaic') Dravidian speakers could have occurred as late as the first half of the first millennium B.C. I have argued several times that attempting reconstructions in such contexts would hardly bring any reliable or realistic results (Vacek 2002a, 2004, 2009a with further references), though reconstruction is made both in Altaic (e.g. Starostin et alia, Poppe 1960) and in Dravidian (cf. Krishnamurti 2003, Southworth 2005a).

2. Select parallels referring to the 'king' and related 'instruments' of power

2.0.

This list of parallels is not coincidental. The 'chieftain' or 'king' uses the 'chariot'; in military activities both 'axe' and 'bow / bowstring' are essential. There is a possibility that the word for 'boat' in some MT. languages (and also Nivh) may be related to the lexeme designating a 'chariot'. It should be underlined that Dravidian has a number of synonyms for all these concepts (including borrowings from IA), which appears to be of great importance.⁴

2.1. King, ruler, chieftain

Ta. *kō*, *kōn*, *kōmān* emperor, king, great man, leadership (plus Ma., Ko.)

? Kur. *kōhā* great, big, haughty, important, eminent in rank, etc.; *kōhar* elders, grandees, chiefs; *koghā* great one, elder relative; *koghar* elders (DEDR 2177)⁵

4. Due to lack of space, this question will have to be discussed in another study.

5. Though the DEDR puts a question-mark before these Kurukh examples with a medial velar, it appears to be rather significant in the following Altaic context.

Mo. *xayan* great Khan, emperor, king (cf. *xan*⁶)

xan Khan, king, chief

MT. *KAYANKĀN* emperor (Evenk.) (MTD I,358)

Variants in other languages: *kan*, *kahán*, *xan* etc.

OT. *xa:n* a title at first practically synonymous with *xagan* but later used mainly for a subordinate ruler (Cl. 630; according to Clauson this word was borrowed by Mongolian)

xağan a title of great antiquity taken over by Türkü in the specific sense of 'an independent ruler of a tribe or people' (Cl. 611)

2.2. Chariot, cart, (?boat)

Ta. *tēr* car, chariot, vehicle; Ma. *tēr* chariot, temple car; Ko. *de·r* god, possession of a diviner by a god; *te·r* possession of a diviner by a god; *te·rka·m* diviner (plus To., Ka., Tu., Te.; DEDR 3459)

Mo. *terge/n/* vehicle; cart, wagon, carriage; car; rook (in chess)

?*teleg* (Go.) cross pieces in a boat; thwarts

MT. *TERGE* cart, wagon (Evenk., Sol., Ma. Mo.; MTD II,238)

At the moment I cannot see any parallels in Altaic with the variant lexemes having the medial sibilant or affricate in Old Tamil, Parji and Gadba:

Ta. **kōcar** name of certain chieftains mentioned in the Sangam literature and connected with the Tuḷu country; Pa. **kōc** king; Ga. **kōsu** id.

6. Both of these two forms occur in Mongolian literature more or less interchangeably, and are rendered into English as Khan. However in modern usage **xayan** is used only for the Great Khan or for a foreign sovereign while **xan** is applied to lesser Khans.

?*TERKE* II boat (of the Nivh type consisting of three boards)
(MTD II,239; cf. Nivh below)

?*TELLEKE* boat (small and flat, of the Nanais) (MTD II,232)

?Nivh *tyrky* boat (high, for the sea) (MTD II,239)

OT. *tilge:n* wheel, disc (Cl. 499: 'unlikely to be a basic word but with no obvious etymology')

A similar word in Slavonic (Russian *telega* cart) comes from the Turkic forms like *tägäräk*, *tägäläk* 'wheel, circle' (in several Turkic languages) and Krym. Tat. *täkär* the wheel of a cart (Fasmer s.v. *telega*).

This seems to be a much broader etymon, which has also verbal parallels and should be treated more exhaustively later. Cf. e.g.:

Mo. *tekere-*, *tekeri-* to return, go back

toyuri- to go about, circle; etc.

teberi- to encircle, encompass with etc.

Ta. *tikiri* circle, circular form, wheel, potter's wheel, the discus weapon, chariot, car; etc. (DEDR 3201)

Besides:

Ta. *tiri-* to turn, revolve, be twisted etc.; Ma. *tiri* a turn, twist; Ko. *tirg-* to turn (it.), return; *tirk* act of going and returning; etc. etc. (DEDR 3246)

2.3. Axe, hammer⁷

Ta. *malu* axe, battle-axe, red-hot iron for ordeals; Ma. *malu* mace, hatchet, red-hot iron for ordeals; Ko. *mar̥t* axe; To. *mošt* axe; Ka. *marcu*, *maccu*, *maccu-katti* billhook or straight

7. This etymon displays a variation between liquids and sibilants in both Dravidian and Altaic, while in Dravidian the liquids are often cerebral (cf. e.g. Vacek 2002a, p. 277).

knife used for cutting bushes; (Hav.) *mađu* axe; Pa. *mađi* large axe for splitting wood; Ga. *mari* axe. Go. *mars*, *maras*, *maras*, *mar(a)su*, *magsu*, etc. id.; Konḁa *marzu* id. Kur. *massā tong'e* a large kind of axe; Malt. *masu* axe (plus Koḁ, Tu., Te.; *DEDR* 4749)⁸

Mo. *balta* big hammer, sledge hammer; axe
?Cf. *müze* staff, stick

MT. *BOLŌ* club, cudgel (Sol.) (MTD I,93)

Olcha (*bułlaŭ* shaman's iron crook, crozier), Nan. (*bolo* id.)

BALTA mallet (Evenk. < Mo. or Yak.) (MTD I,71)

?*PĀŽÆ* rake (MTD II,31)

Ud. *pāžæ* id.; Nan. *fasa*, *faca* (< Ma.) rake, harrow

Ma. *pase* rake

?*POŽĪRŪKŪ* instrument used to strip birch bark (Olcha) (MTD II,40)

?*PURTA* knife (Evenk.) (MTD II,44; plus Komi, Udm.)

OT. *baltu*: (*balto*:) an axe; in the early period more specifically 'a battle
axe', later more generally (Cl. 333)

?*bazğa:n* a blacksmith's hammer (Cl. 390; ? < *bas-* to press, crush,
oppress, make a surprise attack, Cl. 370)

2.4.-5. Related etyma 'bow' - 'bow-string'

The lexemes with these two meanings listed below seem to belong together semantically and also formally. Their formal variation (/cerebral/ liquid - sibilant - including also *DEDR* 5469; initial labial stop - initial labial nasal; loss of initial labial - *DEDR* 789) appears to agree with the types of variation found with other etyma in both

8. Cf. *DEDR* 4748: Ta. **mali-** to shave; *DEDR* 5363a: **vāru-** to trim, as a palmyra leaf to write on; besides

Mo. **möcü-**, **möli-** to cut, trim.

Dravidian and Altaic. The variation of meaning (bow - bowstring) seems to be acceptable under the conditions of language contact mentioned above. In fact this complex of formal and semantic variations seems to be a pertinent 'symptom' of the proposed high contact situation/situations in which these languages were developing.

Ta. *vil* bow; *villan*, *villavan*, *villōn*, *villi* archer; Ma. *vil*, *villu* bow; etc.; Ko. *vily* bow; To. *pīs* id.; Ga. *vind*, *vinḍu* id.; Kui *viḍu*, *vilu* id.; Kuwi *vellū*, *vellu*, *velu* id.; Br. *bil* id. (plus Ka., Koḍ., Tu., Te., Kol., Pa., Go., Konda, Pe., Mand.; *DEDR* 5422)

Kur. *ereth* long-bow; Malt. *ertu* a bow; *ertyo* an archer (*DEDR* 789)

Kui *vesa* bowstring; Kuwi *vacca*, *vaca*, *wāca* id. (*DEDR* 5469)

Mongolian⁹

MT. *BER* bow (weapon) (MTD I,126)

Evenk. *ber*, *berkēn* id.; crossbow

Oroch. *bei*, *beji* bow (weapon; and also in music)

Ud. *bei*, *buji*, *beji* bow (weapon)

Olcha *buri* bow; the town of Khabarovsk

Orok. *buriye*, *burikke* bow

Ma. *beri* bow

berinγ, *beringe* an archer armed with a bow

PAČA bow (Evenk.) (MTD II,36)

PISINĀ releasing catch (in a crossbow) (Evenk.) (MTD II,39)

MISE bow-string (weakened) (Ma.) (MTD I,539)

?*IL* bow-string (Evenk., Even., Neg., Oroch., Ud., Ma.) (MTD I,302)

ibid.: *hurči* + var. (Sol., Olcha, Orok., Nan.)

3. Conclusions

The above few examples further confirm the findings of the previous lexical studies (cf. the References below), including the

9. Classical Mongolian has **num** 'bow'; **sum** 'arrow'; **numiin köbci** 'bow-string'. However, there may be variant forms in other Mongolian languages.

characteristic features of the material parallels - irregularities and variations. There is also the important question of distribution of the relevant lexemes and their synonyms in Dravidian and the consequences this may have for the temporal succession of the various 'layers' in Dravidian, possibly also in correlation with the distribution in Altaic. A similar situation can be seen in Altaic - not all the words are represented in the individual 'branches', in some cases it is the Manchu-Tungus which is represented relatively well. However, there are a considerable number of lacunae.¹⁰

We should also ask about the implications these results have for the history of the Indian linguistic area - the development of the relevant languages in time and space. The analysis of the borrowings in the *R̥gveda* (Witzel 1999 on the basis of previous studies, esp. Kuiper 1991) has shown that there are a great number of Munda borrowings and a negligible number of Dravidian borrowings in the *R̥gveda* (the earliest text, cca. 1700-1000 B.C. in the North-West of India). On the other hand, the later Vedic texts - the *Atharvaveda* and particularly the *Śatapathabrāhmaṇa* - are more profusely influenced by Dravidian borrowings. On that basis Witzel (1999: 21) concluded that at the beginning of the Indo-Aryan immigration to India, the Indo-Aryans encountered the Mundas in the Punjab, but not the Dravidians.¹¹

From that follows the implication that there is a sandwich-like situation in Dravidian, which contains at least two layers - the 'original

10. This will also have to be considered in the context of comparative Altaic studies, in particular the relation between Turkic and Mongolian (cf. Schönig 2003, Rassadin 2007, 2008). It can be presumed that the answers will also be found in the sphere of sociolinguistics, contact between languages etc.

11. Witzel (1999, p. 21, web version p. 23) writes: 'This result is important for the time of the immigration of speakers of Dravidian into the Panjab and it specifically underlines that the Indo-Aryans did not at once get into contact with speakers of Drav. but only much later, when the tribes speaking IA were already living in the Panjab and on the Sarasvatī and Yamunā. Apparently, Dravidian speakers began influencing the Punjab only at this moment in time (cf. Allchin 1995: 31 sqq., see above). Consequently, all linguistic and cultural deliberations based on the early presence of the Drav. in the area of speakers of IA, are void or they have to be reinvestigated.' However, the question remains from which direction the early Dravidian languages could have come. In the light of the Dravidian and Altaic parallels, it probably was not 'middle and later RV immigration of Drav. speakers from Sindh' as Witzel (1999, p. 21; web version, p. 24) would assume.

(pre-Altaic) Dravidian' and the Altaic 'superstratum'. The latter is represented more widely and is to be defined by way of comparison with the Altaic languages, particularly in lexicon - supported also by a number of various synonyms in Dravidian (including also borrowings from Indo-Aryan).¹² In fact in this context the Altaic parallels are something like 'reference points', which help to identify one of the layers in Dravidian.

We have to ask who were the original Dravidians, whether they came at a later time (and when approximately), or whether they were one of the different groups of *Mlecchas* (cf. Parasher 1991, Parasher Sen 2002) who interacted in ancient India and were referred to in the old texts as separate ethnic groups partly because of different speech and partly also because of a different culture. When looking for the answers to these questions, we should not forget that archaeology may also be of help, if we are able to analyse and interpret the available data. In relation to Indo-Aryan this was partly done by Parpola (1999). Southworth (2005b) has studied the problem of the relation between Dravidian and Indo-Aryan. Regarding the immigration of groups of people to Northern India in the prehistoric past, Sjoberg (2005: 73) expressed the idea that the incoming Aryans did not have to come in the form of massive invasions. This seems to be quite acceptable, because it is not so much the number of the newcomers, but their technological and social status (military, political etc.), which is decisive for their impact (including linguistic impact) on the newly 'inhabited' (not necessarily 'invaded') area.

With regard to the Dravidian and Altaic parallels, the question of India's relations with Central Asia in the past is essential. One relevant aspect of these relations was studied by A. Parpola (1999), who proposed the 'historical correlation' of the various Old Indo-Aryan dialects and the archaeological periods. We should ask whether this sphere of study could also be relevant for the Dravidian and Altaic relationship and, as I have proposed recently, whether among the early

12. On the other hand, as concerns foreign borrowings in Indo-Aryan, even those lexemes represented in Dravidian need not come from Dravidian but from a pre-Dravidian layer. For that cf. also Witzel (1999) and his study of the Munda borrowings in the Rgveda.

arrivals to India from Central Asia, some groups could not have been speaking a language different from Indo-Aryan.¹³

This is a hypothesis, which would have to be verified through using more material not only of a linguistic type. It will require a thorough study of the archaeological data, which should be correlated with the linguistic data. And no doubt there are also correlations in the sphere of material culture and social structure. Some of these questions were discussed by Deshpande (1995), who asked about linguistic, cultural and biological identities (78f.), while at the same time pointing to disciplinary limitations and the need for caution (80-81).

The question of more layers in Dravidian is also important. As was pointed out above, two basic word classes are missing between the Dravidian and Altaic parallels - numerals and personal pronouns. In this context it should be considered very seriously whether these parts of speech are not related to the 'pre-Altaic' level of Dravidian, which could have had relations (among other things) with Munda and also South East Asia. V. Blažek (2006, 2007) has pointed out that actually these two parts of speech have parallels in Australian languages. A different question would be the possible relations of Dravidian India and Africa.¹⁴

Thus to conclude we may sum up a few points:

- A. There is the necessity above all of careful heuristics which will provide a solid basis for further considerations.

This would have to be based on a thorough analysis of the lexicon, classification according to morphological and semantic criteria: verbs, nouns; basic vocabulary, kinship terms, body, nature, material culture, etc.; specific activities etc. We should be able to collect as much

13. I cannot but repeat the question, which I asked recently, whether the form of dwelling of the early Iron Age megalithic people could be relevant in this context? 'These dwellings recall the yurts of the Central and East Asian nomads.' (Parpola, *ibid.*, par. 4.4). The timing of the megaliths (1100-800 B.C.) would coincide with the increased number of 'Dravidian' borrowings, particularly in the texts of the later **Vedas** and **Brāhmaṇas** (1st quarter of the 1st Millennium B.C.). As for the South Indian megaliths, Parpola (1973) argued for their Indo-Aryan origin.

14. Some inspiration may also be drawn from studies in onomastics, e.g. Balakrishnan 2005.

information as possible about the history of the individual lexemes (if indeed this is possible in all details), whether and from which language they were borrowed and when etc. (in this respect I agree with Ts. Shagdarsürüng 2005: 180ff.). The obvious problem in this case is the fact that we often have to do with languages with no written materials or historical records from prehistoric times, when this contact should have occurred.

- B. We should be able to develop a sufficiently flexible system, a structural framework to accommodate and classify the results of the required heuristic work.

Such a system should at the same time be able to accommodate the mixture of systematic (regular) and unsystematic (irregular) elements (lexical and phonetic) and allow for their interpretation. We should also not forget about the fluid operation of borrowing and re-borrowing¹⁵ and particularly of folk etymology which facilitates the integration of foreign lexemes by interpreting borrowed words against the background of the formal and semantic structure of the receiving language.¹⁶ However, this does not mean that our system of thought should be less rigorous. On the contrary, only we should be able to think in terms of fuzzy sets, if we may borrow this term from mathematics. I can only agree with G. Doerfer (1973), who actually refuses any comparison beyond the established language families and calls it deridingly 'omnicomparatismus': 'The young grammarians are dead. Long live the young grammarians of the future!'¹⁷

15. With languages having a well-documented history it is relatively easy to obtain the relevant information. Cf. e.g. the English words **guard** / **ward**, both of Germanic origin, whose modern meaning does not necessarily point to a common origin. But the first one (**guard**) was filtered (or rather preserved in a more archaic form) through a process of borrowing by French and then from French into English, while the latter (**ward**) underwent a regular development from the early Germanic form into English.

16. One of the very typical examples is the name of the German capital Berlin which reportedly goes back to the Slavonic word **brlina** describing a landscape type represented by countryside with lakes etc. Folk-etymologically, however, it is perceived as if connected with the word for 'bear' and the city duly adopted the bear as a symbol on its coat of arms! For some more examples of folk etymologies cf. Vacek 1995, Note 2.

17. 'Die Junggrammatiker sind tot. Es leben die Junggrammatiker der Zukunft!' (Doerfer 1973: 122).

C. We must be open to further alternative explanations - not only contact, but also massive borrowing or even elements of creolisation.

The Dravidian and Altaic relation is not a unique case. There are analogies not only in India (cf. Chaudhary 2009) but also in other parts of the world - England (influence of French), South America (contact of Spanish and Portuguese with local languages), etc. In other words, accepting the sociolinguistic background also where the development of languages in the past is concerned, requires something like a shift of the paradigm, and ability to admit that there is a whole scale of possible results of language contact which affects the development of individual languages (cf. e.g. Thomason, Kaufman 1988; Stadnik 2005). The degree of mixture/admixture depends on the actual conditions of the contact (social status of the participants, intimacy, duration etc.). As Trudgill (1989: 227) put it discussing the role of contact in linguistic change: '...varieties do not actually simply fall into the two categories of high contact and low contact. The reality is a continuum (underlined by the present author) from high to low contact, with the further complications that degree of contact may change through time, and that contact can be of many different types.' And what is more important, the contact influences both the 'speed of change' and the 'type of change'. In other words, there is hardly any universal recipe.

As mentioned above, the Altaic data (also relatively late, but for Old Turkic and Old Mongolian) can serve as a reference point for the adaptation processes on the Indian soil resulting in the numerous parallels in Dravidian.¹⁸

Therefore, we should be very careful in tasting the various pieces of scattered knowledge, and testing various ways of putting them together into mosaics of possible historical developments. While savouring the various 'combinations', we should also be able to recognise in time the possible bitter implications of these facts and be able to test their accuracy, authenticity and veracity.

18. The Altaic languages, too, seem to be affected by a similar process of contact and borrowing - which actually makes some linguists doubt that there is an Altaic family. However, there seem to be some basic isoglosses uniting the Altaic languages proposed by Poppe, particularly in phonology. But this is a topic for a separate discussion.

BIBLIOGRAPHY

- Andronov, M.S. 1968. Comparative Studies on the Nature of Dravidian-Uralian Parallels: A Peep into the Pre-history of Language Families. *Proceedings of the 2nd International Conference-Seminar of Tamil Studies*. Madras. Pp. 267-278.
- Balakrishnan, R. 2005. African Roots of the Dravidian-speaking Tribes: A Case Study in Onomastics. *International Journal of Dravidian Linguistics*, XXXIV: 1. Pp. 153-202.
- Birnbaum, H. 1977. Linguistic Reconstruction: Its Potentials and Limitations in New Perspective. *JIES Monograph No. 2*. 78 pp.
- Blažek, V. 2006. Was there Australian Substratum in Dravidian? in *Mother Tongue XI*. Pp. 275 -294.
- . 2007. Dravidian Numerals in *Mother Tongue XII*. Pp. 203-214.
- Bouda, K. 1953. Dravidisch und Uralaltaisch. *Ural-Altaische Jahrbücher* 25. Pp. 161-173.
- . 1956. Dravidian and Uralaltaic. *Lingua* 5. Pp. 129-144.
- Burrow, Th., Emeneau, M.B. 1984(2). *A Dravidian Etymological Dictionary* [abbreviated as DEDR]. Oxford.
- Caldwell, R. 1913(3). *A Comparative Grammar of the Dravidian or South-Indian Family of Languages*. London.
- Chaudhary, Shreesh. 2009. *Foreigners and Foreign Languages in India: A Sociolinguistic Study*. Foundation. Delhi. Bangalore etc.
- Clauson, G. 1972. *An Etymological Dictionary of Pre-Thirteenth-Century Turkish* [abbreviated as Cl.]. Oxford.
- Clippinger, M.E. 1984. Korean and Dravidian: Lexical Evidence for an Old Theory. *Korean Studies* 8. Pp. 1-57.
- Deshpande, M.M. 1995. Vedic Aryans, non-Vedic Aryans and non-Aryans in G. Erdosy (Ed.), *The Indo-Aryans of Ancient South Asia*. Berlin, New York: De Gruyter. Pp. 67-84.
- Doerfer, G. 1973. *Lautgesetz und Zufall. Betrachtungen zum Omnicomparatismus*. Innsbruck.

Fasmer, M. 1964-1973. *Etimologičeskij slovar' russkogo jazyka*. Tom I-IV. Izdatel'stvo "Progress". Moskva.

Gopinathan Nair, B. 2008. Review of Vacek 2002a. Dravidian and Altaic 'Water - Viscosity - Cold' in *International Journal of Dravidian Linguistics*, XXXVII, 2, 2008. Pp. 233-237.

Hook, P.E. 1987. Linguistic Areas: Getting at the Grain of History in *Festschrift for Henry Hoenigswald*. Eds. G. Cardona, N.H. Zide. Tübingen. Pp. 155-168.

Hulbert, H.B. 1905. *A Comparative Grammar of the Korean Language and the Dravidian Languages of India*. Seoul: Methodist Publishing House.

Krishnamurti, Bh. 2003. *The Dravidian Languages*. Cambridge: Cambridge University Press.

Kuiper, F.B.J. 1991. *Aryans in the Rigveda*. Amsterdam - Atlanta.

Lessing, F.D. 1960. *Mongolian-English Dictionary*. Berkeley & Los Angeles.

Masica, C.P. 1976. *Defining a Linguistic Area: South Asia*. University of Chicago Press. Chicago. 234 pp.

McAlpin, D.W. 1981. *Proto-Elamo-Dravidian: The Evidence and its Implications*. Philadelphia. 155 pp.

Meile, P. 1949. Observations sur quelques caractères communs des langues dravidiennes et des langues altaïques. *Actes due XXI^e Congrès des Orientalistes*. Paris 1948. ed. 1949. Pp. 207-209.

Menges, K.H. 1964. Altajisch und Dravidisch. *Orbis* 13. Pp. 66-103.

----. 1977. Dravidian and Altaic. *Anthropos* 72. Pp. 129-179.

Ohno, S. 1980. *Sound Correspondences between Tamil and Japanese*. Gakushuin, Tokyo. 109 pp.

Parasher, Aloka. 1991. *Mlecchas in Early India. A Study in Attitudes towards Outsiders up to AD 600*. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.

Parasher Sen, Aloka. 2002. The Sanskrit Word 'mleccha': A Possible Proto-Dravidian Etymology. *Dravidian Studies*, Vol. I. No. 1. Pp. 55-69.

Parpola, A. 1973. *Arguments for an Aryan Origin of the South Indian Megaliths*. Government of Tamil Nadu: State Department of Archaeology.

----. 1999. The Formation of the Aryan Branch of Indo-European in Roger Blench & Matthew Spriggs (Eds.), *Combining Archaeological and Linguistic Aspects of the Past*. (World Archaeology: Archaeology and Language Series 3). London: Routledge. Pp. 180-207.

Poppe, N. 1960. *Vergleichende Grammatik der altaischen Sprachen. Teil 1. Vergleichende Lautlehre*. Otto Harrassowitz. Wiesbaden.

Rassadin, V. 2007. *Očerki po istorii složenija tjurkso-mongol'skoj jazykovoju obščnosti* (Studies of the History of the Turcic-Mongolian Linguistic Community Formation). Part I. Tjukskoe vlijanie na leksiku mongol'skih jazykov (The Turkic Influence on the Lexicon of Mongolian Languages). Elista.

----. 2008. *Očerki po istorii složenija tjurkso-mongol'skoj jazykovoju obščnosti* (Studies of the History of the Turcic-Mongolian Linguistic Community Formation). Part II. Mongol'skoe vlijanie na leksiku tjukskih jazykov (The Mongolian Influence on the Lexicon of Turkic Languages). Elista.

Schönig, Cl., J. 2003. Turko-Mongolic Relations in J. Janhunen (Ed.), *The Mongolic Languages*. Routledge. Taylor & Francis Group. London & New York.

Schrader, F.O. 1925. Dravidisch und Uralisch. *Zeitschrift für Indologie und Iranistik* 3. Pp. 81-112.

Schwink, F.W. 1994. Linguistic Typology, Universality and the Realism of Reconstruction. *JIES Monograph No. 12*. IX + 133 pp.

Shagdarürüng, Ts. 2005. Problems of methodology of Altaic comparative linguistics in *Opera altaistica professori Stanislao Katużyński octogenario dicata*. *Rocznik Orientalistyczny* (Warszawa) LVIII, 1. pp. 179-187.

Sjöberg, A.F. 1999. Dravidian Features in the Religious Content of the Indian Epics. *International Journal of Dravidian Linguistics*, XXVIII, 1. Pp. 71-90.

Southworth, F.C. 2005a. *Linguistic Archaeology of South Asia*. London & New York: Routledge-Curzon.

----. 2005b. Prehistoric Implications of the Dravidian Element in the NIA Lexicon with Special Reference to Marathi. *International Journal of Dravidian Linguistics*, XXXIV, 1. Pp. 17-28.

SRAVNITEL'NYJ SLOVAR' TUNGUSO-MAN'ČŽURSKIĖ JAZYKOV [A Comparative Dictionary of the Manchu-Tungus Languages]. [abbreviated as MTD]. Izdatel'stvo 'Nauka'. Leningrad 1975-1977.

Stadnik, Elena. 2005. Über die Mechanismen einer sprachkontaktbedingten Entwicklung in *Akten der XI. Fachtagung der Indogermanischen Gesellschaft* (17.-13. September 2000. Halle an der Saale). Dr. Ludwig Reichert Verlag. Wiesbaden 2005. Pp. 655-659.

Starostin, S. Dybo, A., Mudrak, O. 2003. *Etymological Dictionary of the Altaic Languages*. Handbuch der Orientalistik 8/1-3. Brill. Leiden. Boston.

Subrahmanian, N. 1966. *Pre-Pallavan Tamil Index*. University of Madras, Madras.

Subramoniam, V.I. (occasionally abbreviated as VIS). 1962. *Index of Puranaanuuru*. University of Kerala. Trivandrum.

Thomason, S.G. & Kaufman, T. 1988. *Language Contact, Creolization and Genetic Linguistics*. Berkeley, Los Angeles, London: University of California Press.

Trudgill, Peter. 1989. Contact and Isolation in Linguistic Change in L.E. Breivik & E.H. Jahr (Ed.), *Language Change: Contributions to the Study of its Causes*. Berlin, New York: Mouton de Gruyter. Pp. 227-237.

Tyler, S.A. Dravidian and Uralian: The Lexical Evidence. *Language*, 44.4. Pp. 798-812.

Vacek, J. 1977. Helnij garlyn holboony tuhaj (mongol dravid helnij barimtan deer) in *Olon ulsyn mongolč erdemtnii III ih hural*. II-r bot'. Ulaanbaatar. Pp. 44-55.

----. 1978. The Problem of the Genetic Relationship of the Mongolian and Dravidian Languages. *Archiv Orientální*, 46, 2, 1978. Pp. 141-151.

----. 1981. The Dravidian-Altaic Relationship - Lexical and Sound Correspondences in *Proceedings of the Vth International Conference-Seminar of Tamil Studies* (Madurai). Madras. Vol. 1. Pp. 159-170.

- . 1983. Dravido-Altaic: The Mongolian and Dravidian Verbal Bases. *Journal of Tamil Studies*. No. 23.1-17 (reprint Vacek. J, 1985, Dravido-Altaic: The Mongolian and Dravidian Verbal Bases in *Olon Ulsiin Mongolč Erdemtnii IV Ih Hural*. 2-r bot'. Ulaanbaatar 1985, str. 495-513).
- . 1987. The Dravido-Altaic Relationship. Some Views and Future Prospects. *Archmv Orientální*, 55, 2. Pp. 134-149.
- . 1992a. The Dravidian and Mongolian Linguistic Comparison in *Contacts between Cultures, South Asia*. Vol. 2. Selected Papers from the 33rd International Congress of Asian and North African Studies (Toronto, August 15-25, 1990; 21.8.90). Lewiston/Queenston/Lampeter 1992. Pp. 137-139.
- . 1992b. Dravidian and Mongolian "to laugh, to smile, to deride". *PILC Journal of Dravidic Studies* 2.2. Pp. 147-151.
- . 1992c. Dravidian and Mongolian "to be, to become, to exist (in a place)" and the negative verbs of existence in *Ex pede pontis*. Sbornmk Orientálního ústavu ČAV. 1992. Pp. 253-263.
- . 1993. Lexical Parallels in the Dravidian and Mongolian Comparison. *Archmv Orientální*, 61. Pp. 401-411.
- . 1994. To say, To speak, To prattle, To shout in Dravidian and Mongolian. *PILC Journal of Dravidic Studies*, 4, 1. Pp. 1-17.
- . 1995. Lexical Features of the Indian Linguistic Area. *PILC Journal of Dravidic Studies*, 5, 1. Pp. 17-28.
- . 1996a. Dravidian and Mongolian, Summary of Results. *Archmv Orientální*, 64. Pp. 31-46.
- . 1996b. 'To grow, to rise, to be great' in Dravidian and Altaic. *Archmv Orientální*, 64. Pp. 304-343.
- . 1998. Tamil Etymological Notes 1 in *PILC Journal of Dravidic Studies*, 8, 2. Pp. 133-145. Pondicherry.
- . 2000. Tamil Etymological Notes 2 in *PILC Journal of Dravidic Studies*, 10, 1. Pp. 17-40. Pondicherry.

----. 2001a. Dravidian and Altaic 'Hot - Fire - Heat' (DEDR 1458 and the related etyma with initial k-/g-) in '*Gramaticus*' (*Adolfu Erhartovi k 75. narozeninám*). Brno 2001. Pp. 175-200.

----. 2001b. Dravidian and Altaic 'Fire - Glow - Light' (tVL-, dVL-, nVL-; VL-) in *Tofa-e-Dil. Festschrift Helmut Nespital*. Dr. Inge Wezler Verlag für Orientalistische Fachpublikationen. Reinbek 2001, Bd. 1. Pp. 561-576.

----. 2002a. *Dravidian and Altaic 'Water - Viscosity - Cold'. An Etymological and Typological Model*. Charles University. The Karolinum Press. Prague. 359 pp. (cf. Gopinathan Nair 2008)

----. 2002b. Emphasizing and Interrogative Enclitic Particles in Dravidian and Altaic in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLICA PRAGENSIA '02. Ethnolinguistics and Sociolinguistics in Synchrony and Diachrony*. Charles University & Triton, Praha. Pp. 151-185.

----. 2002c. Dravidian and Altaic "Deer - Antelope - Bull". *Indologica Taurinensia* XXVIII. Pp. 251-266.

----. 2003. *Verba Dicendi* and Related Etyma in Dravidian and Altaic (Etyma with initial sibilants or affricates) in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLICA PRAGENSIA '03. Ethnolinguistics and Sociolinguistics in Synchrony and Diachrony*. Triton, Praha. Pp. 175-205.

----. 2004a. Dravidian and Altaic "Sheep - Deer - Cattle" in Jean-Luc Chevillard (Editor) & Eva Wilden (Associate Editor) with the collaboration of A. Murugaiyan, Institut Français de Pondichéry. *South-Indian Horizons (Felicitation Volume for François Gros on the occasion of his 70th birthday)*. Paris: École Française d'Extrême-Orient. 2003. Pp. 333-345.

----. 2004b. Dravidian and Altaic - In Search of a New Paradigm. *Archív Orientální* Vol. 72. Pp. 384-453. Reprinted as 2006a.

----. 2004c. *Verba Dicendi* and Related Etyma in Dravidian and Altaic 2.1. Etyma with initial velars in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLICA PRAGENSIA '04. Ethnolinguistics and Sociolinguistics in Synchrony and Diachrony*. Triton, Praha. Pp. 195-230.

----. 2005a. Dravidian and Altaic 'to break, to beat, to crush, to rub' (Ta. *kavi* - Mo. *xabir-* / *xayar-* - MT. *KAPU-* / *KAV bL-* / *KAN̄TARĀ-* - OT. *kam-* / *kak-*). *Archív Orientální* Vol. 73. Pp. 325-334.

- . 2005b. *Verba Dicendi* and Related Etyma in Dravidian and Altaic 2.2. Etyma with initial velars and final liquids in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLICA PRAGENSIA '05. Ethnolinguistics and Sociolinguistics in Synchrony and Diachrony*. Triton, Praha 2005. Pp. 171-197.
- . 2005c. Dravidian and Altaic Parts of the Body 1. Breast in *Acta Mongolica* Vol. 5 (246). Dedicated to the 100th Birthday of Professor Yo'nsiebu' Biyambyin Rinc'en (1905-1977). Ulaanbatar 2005. Pp. 65-70.
- . 2006a. Dravidian and Altaic - In Search of a New Paradigm. *International Journal of Dravidian Linguistics* (Trivandrum, India) Vol. XXXV, No. 1, January 2006. Pp. 29-96. (Reprint of Vacek 2004b)
- . 2006b. Dravidian and Altaic 'to bow, bend, stoop, incline, curve'. 1. (C)VC- roots with initial labials and medial velars or labials. *Archív Orientální* Vol. 74. Pp. 183-202.
- . 2006c. Dravidian and Altaic Parts of the Body 2. Hair, feather in Ts. Shagdarsuren (Ed.). *Acta Mongolica* Vol. 6 (267). Dedicated to the 90th birthday of Professor Denis Sinor. Ulaanbaatar 2006. Pp. 79-82.
- . 2006d. *Verba Dicendi* and Related Etyma in Dravidian and Altaic 3.1. Etyma with initial labials (*p-*, *b-*, *f-*, *v-*, *m-*) in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLICA PRAGENSIA '06. Ethnolinguistics and Sociolinguistics in Synchrony and Diachrony*. Triton, Praha. Pp. 163-190.
- . 2007a. Dravidian and Altaic Parts of the Body 3. Heart, chest, inside, mind, thought in *Mongolian Studies* Vol. 22 (Seoul, The Korean Association for Mongolian Studies). Pp. 27-45.
- . 2007b. Dravidian and Altaic 'to bend / to bow - elbow / knee / ankle'. Initial dental stop or nasal, medial velar or labial. *Archív Orientální* 75, No. 3. Pp. 395-410.
- . 2007c. *Verba Dicendi* and Related Etyma in Dravidian and Altaic 3.2. Etyma with initial labials (*p-*, *b-*, *f-*, *v-*, *m-*) and root-final liquids and retroflex stops in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLICA PRAGENSIA '07. Ethnolinguistics, Sociolinguistics and Culture* Vol. 1. 2007. Charles University & Triton, Praha. Pp. 87-113.
- . 2007d. Dravidian and Altaic - A New Macrofamily on the Horizon? in *MONGOLICA, An International Annual of Mongol Studies* Vol. 20

(41), 2007. pp. 429-443. A special issue containing the papers of The 9th International Congress of Mongolists convened under the patronage of N. Enkhbayar. President of Mongolia (8-12 August, 2006, Ulaanbaatar) Ulaanbaatar. Secretariat of the International Association for Mongol Studies.

----. 2008a. *Verba Dicendi* and Related Etyma in Dravidian and Altaic 4.1. Etyma with initial dentals (*t*-, *d*-, *n*-) in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLO-TIBETICA PRAGENSIA '08. Linguistics, Ethnolinguistics, Religion and Culture* Vol. 1/1. Charles University & Triton, Praha 2008. Pp. 99-133.

----. 2008b. Dravidian and Altaic Parts of the Body 4. Liver, spleen in *Acta Mongolica* Vol. 8 (306). Dedicated to the 70th Birthday of Professor D. Tumurtogoo. Ulaanbaatar 2008. Pp. 7-14.

----. 2009a. Dravidian and Altaic - Problems and Solutions in *Oriental Studies*. Proceedings of the *International Conference of Oriental Studies*. 55 years of the Committee of Oriental Studies of the Polish Academy of Sciences (1952-2007). *Rocznik Orientalistyczny* 62, 2009, 1. Pp. 224-235.

----. 2009b. Dravidian and Altaic 'to bend' - Ta. *kavi*- / *kavi* -, Mo. *kebüi*- / *köbüre*-, MT. *KAMPI*- / *KEBILE*- in *MONGOL STUDIES* (Research Papers) Volume XXX (318). D. Zayabaatar, M. Uuganbayar (Editors-in-chief). School of Mongolian Language and Culture, National University of Mongolia, Ulaanbaatar, 2009. Pp. 157-168.

----. 2009c. Dravidijskij i altajskij - jazyki drevnih intensivnyh kontaktov (Dravidian and Altaic - Ancient High Contact Languages) in *Problemy mongolovednyh i altaističeskikh issledovanij* (Problems of Mongolian and Altaic Studies). *Materialy meždunarodnoj konferencii, posvjaščennoj 70-letiju professora V.I. Rassadina* (Materials of an International Conference in Honour of Prof. V.I. Rassadin on his 70th Birthday). Elista 2009. Pp. 50-58.

----. 2009d. Vacek. Dravidian and Altaic 'to wave / to tremble - arm / shoulder-(blade) / wing' in *Acta Mongolica* Vol. 9 (320). Dedicated to the 80th Birthday of Professor Rachelwitz. Ulaanbaatar 2009. Pp. 7-14.

----. 2009e. *Verba Dicendi* and Related Etyma in Dravidian and Altaic 4.2. Etyma with initial dentals (*t*-, *d*-, *n*-) and root-final liquids and retroflex stops in J. Vacek & A. Oberfalzerová (Eds.),

MONGOLO-TIBETICA PRAGENSLA '09. Linguistics, Ethnolinguistics, Religion and Culture Vol. 2/1, 2009. Charles University & Triton, Praha. Pp. 123-143.

----. 2009f. Dravidian and Altaic - Two Layers in Dravidian due to Ancient High Contact? in J. Vacek & A. Oberfalzerová (Eds.), *MONGOLO-TIBETICA PRAGENSLA '09. Linguistics, Ethnolinguistics, Religion and Culture* Vol. 2/2, 2009. Charles University & Triton, Praha. Pp. 75-107.

----. 2010. Dravidian and Altaic Parts of the Body 5. 'Extremities' - head, finger, foot/leg. *Rocznik Orientalistyczny* 63.1. In press.

----, Lubsangdorji, J. 1994. Dravidian-Mongolian-Chuvash Kinship Terms. *Archív Orientální* 62. Pp. 401-414.

Witzel, M. 1999. Early sources for South Asian substrate languages in *Mother Tongue*. Special Issue. pp. 1-70 (web version: <http://www.people.fas.harvard.edu/~witzel/MT-Substrates.pdf>).

Zvelebil, K.V. 1990. *Dravidian Linguistics, An Introduction*. Pondicherry: Pondicherry Institute of Linguistics and Culture.

----. 1991. Long-Range Language Comparison in New Models of Language Development: The Case of Dravidian. *PILC Journal of Dravidic Studies* 1.1. Pp. 21-31.

STUDY OF INTRANSITIVES, TRANSITIVES AND CAUSATIVES IN THE TRADITION OF THE TAMIL AND MALAYALAM GRAMMARIANS

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Dedicated to Prof. V.I. Subramoniam -a great teacher, scholar and humanist for drawing me into the intellectual world of Tamil and Dravidian studies. This article is one of the results of studying and researching under his guidance for the last five decades. That great light illuminated everything that came within its radius.

INTRODUCTION

The grammatical categories intransitive, transitive and causative represent different realities in different language families. Traditionally transitivity is determined on the basis of the presence of an object. The transitive verbs assign also a specific function to its subject in relation to the object. In a language like Tamil or Malayalam the object noun is often marked by an accusative suffix or the noun itself undergoes some changes before the addition of the accusative suffix. Both syntactic and morphological contexts determine transitivity. Causativity is determined in relation to transitivity. While 'eat' in English is transitive, the verb 'feed' becomes a causative. The verb 'broke' in a sentence like 'The glass broke.' is intransitive, while the same verb in a sentence like 'I broke the glass.' is transitive. A limited number of verbs have both intransitive and transitive features.

In the case of the causative, the subject causes a new state of affairs to come into existence as a result of the event denoted by the verb.

There is a thematic relationship between the subject and the verb. The subject causes a new state of affairs. In the case of Tamil and Malayalam there are three different thematic relationships among the intransitive, transitive and causative: the subject undergoes an action, the subject effects an action on the object and the subject causes an action to happen on the object. The present paper is an attempt to trace the linguistic historiography of the intransitives, transitives and causatives.

THEORIES OF TRANSITIVITY

The traditional definition "the verbs which are capable of taking a direct object are transitive and those which are not capable of taking a direct object are intransitive." is not valid in the case of Tamil or Malayalam. Transitivity is not defined on the basis of the capacity of a verb to take an object, like *koṭu-* 'to give', *eṭu-* 'to take' and *anuppu-* 'to send'. Presence of an object is secondary. There should be a distinguishing suffix which corresponds with the sense 'subject of a sentence makes the object to execute an action'. The following examples may illustrate this distinction: *avan vantān*. 'He came.' *avan kulantaiyai varuttinān*. 'He made the child to come.' Morphological analysis of the verbs show the following structure: *va-nt-ān* 'come + past tense + he' and *varu-tt-in-ān* 'come + transitive + past tense + he'. This feature and structure are found in almost all the Dravidian languages.

Tamil	<i>ōṭu-</i>	'to run'	<i>ōṭṭu-</i>	'to make something run'
Malayalam	<i>ōṭu-</i>	'to run'	<i>ōṭṭu-</i>	'to make something run'

As we have seen in the translation of a transitive, a phrasal structure replaces the transitive suffix in Indo-European. On the basis of this translation, the Indo-Europeanists insist that the Dravidian phenomenon of transitive is indeed a causative. We have shown that the causative constructions in Tamil and Malayalam are marked by another suffix.

THE DRAVIDIAN VERB

Transitive-causative is found in almost all the 26 Dravidian languages (Krishnamurti 2003: 279-291).

Structure of a Dravidian Verb				
1	2	3	4	5
Root	Intransitive	personal object base	tense/mode	personal endings (person, number and gender)
		plural action base		
	Transitive	motion base	negative	

The older grammatical traditions recognize only the three basic grammatical features Stem/Root + tense + person, number and gender marker. Negation is added as an additional feature. Transitivity, though an inherent feature of a Dravidian verb, did not receive the attention of the traditional old Tamil or Malayalam grammarians. Even though a transitive suffix can be identified and separated like the tense and person, number and gender suffixes, the traditional grammarians did not pay any attention to this important grammatical category. A stem may be intransitive, transitive or causative. The transitive and causative stems are explicitly marked by the corresponding suffixes.

STRUCTURE OF A TAMIL AND MALAYALAM VERB

A simple Dravidian finite verb has three parts: the stem or the root followed by a tense/mood marker and closed by a marker for person, number and gender (PNG).

St. + Tense/Mood + PNG

The following Tamil and Malayalam examples illustrate this basic structure:

Tamil *va + nt + ān* ‘come + past tense + he’ ‘he came’.

Malayalam *va + nnu* ‘come + past tense’

Complex verb forms of a finite verb show more grammatical features such as transitivity/causativity and negation.

VIEWS ON TRANSITIVITY

TRADITIONAL TAMIL GRAMMARIANS

Tolkappiyam

This earliest extant Tamil grammar of the 3rd cent. A.D. consists of three parts, and deals with phonetics, phonology, morphology, syntax, semantics and poetics of Old Tamil. As for the verb morphology of Old Tamil is concerned it deals mainly with the formation of personal suffixes, tense, negation and verbal stems. Strangely enough not a word is uttered about the transitive or causative formation in Tamil. However, in the meta language of its author we come across transitive forms. They are also found in the Old Tamil literature such as *tiruttuvōr* (*Paripāṭal* 12) and *karpittār* (*Kuruntokai* 112). In chapter five (*uriccol*) of *Collatikāram* the author lists 120 adjectival and adverbial stems of which some can also be extended as verbs. Interesting are the items 33 and 34. Item 33 *tīrtal* 'separation' and item 34 *tīrttal*, a transitive form, 'separation' found in *Tolkāppiyam* are also found in the classical Sangam literature (*Puranānūru* 320 and 3).

We have mentioned below that the Tamil terms *tanvinai* 'act of oneself' and *piravinai* 'act of another' are used by the Western missionary grammarians as well as by the later traditional Tamil and Malayalam grammarians to describe the grammatical features intransitive and transitive, respectively. The term *tanvinai* appears for the first time in the earliest Tamil grammar *Tolkāppiyam*, second book *Collatikāram* 203 (3 - 5 cent. A.D.). However, the aim of the use of *tanvinai* in this sutra is not the description of transitivity. It reads in Tamil "*tanvinai uraikum tanmaic collē*". The *sūtra* deals with the first person singular suffix, which is a closing morpheme of a finite verb. The *tanmaic col* 'first person singular suffix' expresses the act of one's own. *Tolkāppiyam* makes a contrast between *tān* 'self' and *piran* 'other' (Tol. Col. 243); however, it is not related to intransitive and transitive contrast. The second important Tamil grammar *Nannūl* (14th cent A.D.) uses in sutra 332 the term *tannoṭu* 'with self' while describing first person inclusive plural (Paramasivam 1979: 34).

Viracōliyam

A Buddhist author known as Puttamittiraṇ wrote the Tamil grammar *Viracōliyam* in the eleventh century A.D. He describes the

Tamil language on the model of Sanskrit. The simple root is called *kēvalat tātu*. Tamil *piravinai* (transitive) is named as *kāritam* and the causal gets the name *kāritak kāritam* (sutra 65 and 66). While the Tamil grammars *Tolkāppiyam* and *Nannūl* are silent about intransitive and transitive, the Sanskrit based *Viracōliyam* points out this important Tamil feature. T.P. Meenakshisundaram (1974: 151-152) mentions this aspect of the Tamil grammars with Sanskrit approach.

Nannūl

Nannūl, a fourteenth century Tamil grammar, does not deal with transitives-causatives or intransitives. It begins the chapter (sutra 320) on verb with the enumeration of the following six features of a verb: 1. actor (agent), 2. instrument (of an action), 3. place (of the action), 4. action, 5. time (the of action), 6. product or result (of the action). It gives further importance to person, number and gender. Tense receives a meagre mention (sutra 382). There are three tenses: past, future and present. Further details about the tense suffixes are not found.

It is strange to confirm that the explicit transitive and causative suffixes which play a crucial role in the semantic differentiation and are morphologically marked are completely left out. The author might have considered the transitive and causative suffixes which occupy a position next to the root, as part of the root or stem and therefore there is no need to explain them separately. However, morphologically as well as semantically they are similar to the tense and person-number-gender suffixes. It remains a mystery why this topic is almost left out by the earlier Tamil grammarians.

Ilakkaṇakkottu

Another grammar of the 17th cent. A.D., *Ilakkaṇakkottu*, is the first to name a class of verbs with single consonant as *tanvinai* and a class of verbs with geminated consonants and with the causative suffix as *piravinai*. The author mixes the transitives with the causatives.

COMMENTATORS

The commentators of *Tolkāppiyam* (e.g. Naccinārkkiniyar, 14th cent. A.D.) and *Nannūl* (Saṅkaranamaccivāyar, 17th cent. A.D.) use the terms *tanvinai* and *piravinai* when they refer to the single and

geminated consonants in verbs. The forms with the geminated consonants are mostly transitives. It is important to point out that the doubling or gemination is relevant only in the context of an opposition between single and double.

MISSIONARY TAMIL GRAMMARIANS

HENRIQUE HENRIQUES (1520 - 1600 A.D.)

Henrique Henriques, the Portuguese Jesuit Father, wrote in Portuguese a Tamil grammar in the period 1548-1564. Hans J. Vermeer published in 1982 the manuscript of this grammar with notes and introduction. Henriques description is based on the spoken and written varieties of Tamil. However, the emphasis is on the spoken Tamil. In his extensive description of the morphology of nine groups of verbs, he describes the derivational morphology on the basis of a representative verb belonging to each one of the nine groups. However, intransitives, transitive and causative formations did not draw his attention. It is interesting to note how he struggles to accommodate the transitive forms of some of the verbs into his classification system by naming the transitive forms as irregular verbs of the corresponding intransitive verbs. For example, in his group two conjugations he lists *taga-* (for *takar-*), *vala-* (for *vaḷar*) and *tira-* (for *tira-*) as irregular because they take different past and future tense suffixes depending upon whether they are transitive or intransitive (1982: 58-69). The causative suffix *-ppi-* (*vicuvācippikkirēn*) is found in one example (1982: 151). His orientation in the Latin tradition is evident from the grammatical terminologies employed in his grammar. Except the causative suffixes, we do not come across this phenomenon anywhere else.

C.J. BESCHI

C.J. Beschi (1728¹, 1848²) does not use the terminologies intransitive, transitive and causative. However, the transitive formation is partly and indirectly described in the section on the past tense, and the causative formation is described in the section (132) on 'Verbs of Command'. An action which is done by the command is expressed in the following way: from the future *-pēn* is formed *-pikkiratu* and from *-vēn* is formed *-vikkiratu*. He gives one more illustration: from *aṭippēn* comes *aṭippikkirēn*, *aṭippittēn* and *aṭippippēn* and the causative meaning

is 'cause to strike'. Though the causative suffix is used, the meaning is transitive because the conversion is from intransitive to transitive.

C.T.E. RHENIUS (1834, 1836)

The German missionary Rev. Rhenius (1834: 79) used the terminologies intransitive and transitive for the pairs of verbs where single and double consonants alternate for this opposition. He pointed out that the weak verbs are intransitive and the strong verbs are transitive. His chapter on causal verbs (edition 1836: 102) shows his orientation with Indo-European grammatical description.

G.U. POPE (1855)

Pope (1855: 46-47) uses the terms weak and strong verbs for the same phenomenon, and added that the weak verbs are generally intransitive and the strong verbs are mostly transitive. Middle verbs include both intransitives and transitives.

R. CALDWELL (1856)

Caldwell translated the Tamil grammatical terms *tan-* and *piravinai* as intransitive and transitive, respectively, and pointed out a possible correspondence with the Sanskrit *ātmanē-padam* and *parasmai-padam* (1856: 449). However, he immediately showed the dangers of such a comparison by drawing our attention to the morphological suffix which distinguishes a *piravinai* (transitive) from a *tanvinai* (intransitive), and the fact that they govern the accusative through the transition of the action to an object. Caldwell describes the four modes of transitive formation: doubling of a consonant in the formative suffix of a stem, doubling of a consonant in the tense suffix, addition of a separate transitive suffix and doubling of a consonant in the stem itself. Caldwell is fully aware of the morphological changes taking place in a verb stem and its immediate suffix.

The Tamil intransitive and transitive contrast, marked by a transitive suffix, is not found in every verb. In other words, every verb has not an intransitive and transitive pair distinguished by a transitive suffix. Object is not a marker of transitivity. The primary marker is a transitive suffix. Caldwell is aware of the distinction between a Tamil transitive and a causative. He (1856: 455) remarks: "There is a class of

verbs in the Dravidian languages which, though generally included under the head of *transitives*, claims to be regarded distinctively as causals. These verbs have been classed with transitives both by the native grammarians and by Europeans."

The intransitive and transitive form a pair while the causative suffix can be added to any verb. Three oppositions are possible for the intransitive-transitive pair: intransitive, transitive and causative and in the case of intransitives without a transitive pair only two oppositions are possible: intransitive and causative. Caldwell (1856: 455) names verbs such as *anuppu-* 'to send' as transitive even though an explicit transitive suffix is absent in this verb. The causative of this verb is *anuppuvi-* 'to cause to send'. Caldwell points out that the Indo-European languages fail to express this meaning with a single verb. They need a phrase.

Caldwell gives an important signal to the Indo-European grammarians who try to name the Tamil transitive formation as "causative". Even the Tamil transitives are regarded as causatives by the Western grammarians. They disregard the morphological distinction involved in the transitive formation. Traditional Western grammarians like Caldwell and Beschi noticed the semantic and morphological differences between an intransitive and transitive pair of verbs.

A.H. ARDEN (1891)

Arden (1891) uses the terminology strong and weak verbs. Very interesting is the fact that he uses the terminology 'causal verbs' for the strong verbs. He explains that a transitive is formed from an intransitive stem by gemination or doubling of the consonant. Arden struggles with the Indo-European terminology 'causal verb' and the terms such as intransitive and transitive (Arden, Reprint 1969: 168).

For Arden the causative verbs are formed from the simple root by the addition of *vi*, e.g. *arivi-* 'cause to know'. On p. 237 he points out that the causative is formed with the suffixes *vi* and *ppi*, e.g. *natappi*. However, he describes the transitives as causatives too, cf. *natappi* and *natattu*. Arden considers all the transitives where the transitives are formed by changes in the stem, as causatives. On p. 172, however, he describes the transitive formation: "From many roots both Intransitive

and Transitive Verbs are formed. The Intransitive Verb usually expresses experiencing, enduring, and action which is confined to the subject of the verb and does not pass on to an object. *pōnēn* I went. A Transitive Verb denotes action that does pass over to an object. *vīṭṭaip pārttēn* I saw the house." Arden points out the difference in the same verb when it is intransitive and transitive. When it is intransitive it is a weak verb, e.g. *alivēn* and when it is transitive it is strong, e.g. *alippēn*. Arden follows in the first place the definition based on the capacity to take an object. Further when he describes the derived transitives, he points out the gemination. Causatives are marked by *vi* and *ppi* and by changes in the stem, like *ēru* vs. *ērru*, *ōtu* vs. *ōttu*, *kalaṅku* vs. *kalakku* and *āku* vs. *ākku*.

H. BEYTHAN (1943)

Hermann Beythan (1943: 116-117) brings the phenomenon of transitive and causative formation under one heading "Das Kausativum". He includes in his description all the derivations of transitive and causative constructions, and brings them under two groups, of which the first has three sub-groups and the second two sub-groups. He does not use the term 'transitive'.

The German missionary grammarian Beythan and the English missionary grammarians like Arden and Robert Caldwell (19th cent. A.D.) recognise the process of gemination in verbs in combination with the tense markers such as *varu-kir-ēn* 'I come.', *koṭu-kkir-ēn* 'I give.', *acai-kkir-ēn* 'I make something to move.'

MODERN INDIAN TAMIL GRAMMARIANS

L.V. RAMASWAMI AIYAR (1938)

In some of his (1938: 751-756, 1939: 169-174) earlier papers on the Tamil verb L.V. Ramaswami Aiyar describes in detail the formation of the transitive and causative stems in Old Tamil. He (1939) starts with the following statement: "These correspond to the *piravinai* of Tamil grammatical terminology." He prefers the English terminology transitive-causative formation for two reasons: 1. According to him all of them are true causatives because they express the cause of actions done by others (whether persons or things) and 2. the derivation involves conversion of intransitive bases to transitive ones in some

groups of verbs and in the others the derivation involves both from transitives and intransitives. Ramaswami Aiyar, in the first place, follows the Western grammarians in determining the transitivity on the basis of an object, and in the second place, based on a morphological process of converting the intransitives to transitives. He is also in a dilemma when the object oriented transitive verbs are again transitivised by a derivational suffix. He calls them also as transitives. The terminology causative is reserved for the transitive formation with the suffixes *vi*, *pi* and *ppi*, which he names as "the so-called causative-denoters" (1939: 173). It is also significant that he equates the transitives with the *piravinai*. He is one of the early Indian grammarians of the new era accustomed with the Western description and categorisation. He distinguishes two primary transitive formations: 1. Transitive derived from an intransitive stem by suffixation such as *vīl-* 'to fall' and *vīl_{ttu}-* 'to make something fall' and 2. by gemination such as *ōtu-* 'to run' and *ō_{ttu}-* 'to make something run, to chase'. The transitivo-causative suffixes such as *vi*, *pi* and *ppi* can be added after every stem irrespective of the feature whether it is an intransitive, transitive (on the basis of object) or derived transitive (on the basis of changes in the stem). Unlike the traditional grammarians he recognises transitives as a separate category, equates it to the traditional *piravinai* category and distinguishes it from the Western concept of transitive based on an object.

In his earlier article (1938) he prefers the terminology causative instead of transitive. However, he (1938: 752) describes this phenomenon as 'causativo-transitival formation'. The verbal bases such as *etukka* and *kulikka* are also, in his view, causatives because of the formative suffix *-kk*. Ramaswami Aiyar follows the Western model in naming this phenomenon.

T.P. MEENAKSHISUNDARAM (1965)

Prof. T.P. Meenakshisundaram (1965: 110-111) sees the contrast as the difference between ergative and non-ergative. In his (1965: 110) view: "Distinctions between tenses, between the ergative and the non-ergative etc. should be later developments as specializations. As already noticed, there are certain forms ending in *tu*, some in *ttu* and some in *ntu*. Forms with the nasal often occur without it: *vilaku* ~ *vilanku* 'move

aside'. The forms with *tu* or *ntu* were utilized as non-ergative stems and the forms with the long plosive were differentiated as ergative stems, e.g. *varuntu* 'to suffer', *varuttu* 'to make someone suffer'." He (1965: 111) denies the distinction between transitive and intransitive: "Once again, it has to be emphasised that the distinction in Tamil is not between transitive and intransitive but only between ergative and non-ergative. The former distinction is syntactic. Transitives and intransitives are described in phrases such as *ceyappatuporuḷ kunriya vinai* and *ceyappatuporuḷ kunrā vinai*, the verb which cannot take an object and the verb which can take an object, respectively. The absence of any technical term for these is significant. The terms for non-ergative and ergative are *tanvinai* and *piravinai*. Unfortunately Caldwell (1956: 449) translated these as transitive and intransitive."

The above-mentioned examples of Prof. Meenakshisundaram are not ergatives. An ergative construction such as 'The ice melted.' is derived from a non-ergative construction such as 'The sun melted the ice.' The object of the non-ergative takes the position of a subject in an ergative construction. It is indeed a syntactic phenomenon. However, the contrast between *varuntu* and *varuttu* is not the same as 'The sun melted the ice.' and 'The ice melted.'

K. PARAMASIVAM (1979)

K. Paramasivam (1979: 20) prefers the terminologies effective and affective instead of intransitive and transitive or *tanvinai* and *piravinai*. In an intransitive the action affects only the subject and in a transitive the subject effects an action on an external object. In both the cases the object plays an important role. In an effective the object is the affective and in an affective the subject is the affective. These terms avoid much confusion surrounding the use of the other terminologies mentioned earlier.

BH. KRISHNAMURTI (2003)

While describing the intransitive, transitive and causative stems in Dravidian, Bh. Krishnamurti follows the general definition of a transitive, i.e., the capacity to take an object. He states (2003: 279): "A simple verb may be inherently intransitive (**ā*- 'to be') or transitive (**ciy*- 'to give') depending on its meaning and its relationship with the

complement phrases in a given clause." He uses further the term transitive-causative and describes the three complementary modes of forming transitive-causative stems. However, he (2003: 279) distinguishes the transitive stems from the causative stems which are formed by the addition of a causative morph *-pi-* ~ *-wi-* ~ *-ppi-* to a transitive verb stem, simple or complex. He uses the term transitives for the transitive stems formed by geminating the final stop of a stem or a following tense suffix or by the addition of a separate transitive-causative suffix such as **-tt-*. However, his use of the terms transitive and causative is not constant because he (2003: 280) names the transitive suffix *-tt-* in Tamil and Malayalam as causative. See further his (2003: 280) use of these two terms in Kurux: "In Kurux, a distinction is made between a transitive with one Agent and a causative with two Agents, e.g. *co'onā* 'to rise': *cō-d-nā* / *cō-da' ānā* 'to raise': *cō-d-ta' ānā* 'to order one to raise' (Grignard 1924: 96-7). It appears that the same marker is used both as a transitive and as a causative." He (2003: 283) uses the term causative to describe the Tamil causative formations with the addition of the suffixes such as *-pi-* and *-ppi-* as in *koṭu-ppi-tt-ōn* 'he caused (something) to be given.' In the whole description of intransitive, transitive and causative there is no discussion of the use of these terms for the phenomenon found in Dravidian.

P.S. SUBRAHMANYAM (1971)

P.S. Subrahmanyam (1971) devotes a long chapter (pp. 1-101) for the descriptive and comparative study of transitives and causatives. His definition of transitive is based on the capacity to take an object. However, he names all the other transitives which are formed from the intransitives by the addition of a transitive suffix, as "derived transitives". He calls the traditional suffixes such as *vi* and *ppi* as causative suffixes. He makes a clear distinction between the transitives and causatives. The same view is again ventilated in his recent book on Dravidian comparative grammar (2008: 305).

MODERN WESTERN TAMIL GRAMMARIANS

JULES BLOCH (1946)

While describing the non-temporal stems Jules Bloch (1946: 48-50) mentions about the only constant opposition of stems, which

distinguishes an active or causal verb from a simple, neutral or transitive verb. From the examples used to illustrate this phenomenon it is obvious that he deals with the transitive-causative stems such as *cel-* 'to enter' and *celuttu-* 'to cause to enter'. His examples show further the causative suffixes *-vi* and *-pi*. He prefers to name such verbs as "causal verb" and in his translation, as shown above, the words 'cause to' reappear. He does not distinguish between the transitives and the causatives such as *cel-* 'to go', *celuttu-* 'to send' and *celuttuvi-* 'to cause to send'. In short, Bloch, most probably following the European tradition, uses the terminology 'causative' for transitives as well as causatives.

M.B. EMENEAU (1967)

Emeneau in his *A Sketch of Kota Grammar* (1944, 1967: 78): "The relations between various actors and undergoers of action in a predication are in the main indicated by syntactic constructions and the morphology of the nouns in those constructions, and not by the verb. In certain cases, however, the verbs take a part in their indication (the category of voice), not by its inflectional system, but on the level of root formation. There are some pairs of verbs which are related to one another as intransitive and transitive. The former indicates that the action which they express is a change of state which the actor undergoes by itself and without the instrumentality of any other actor in the context; e.g., 'it falls in drops.' The transitive verbs indicate that an actor changes the state of the undergoer by action which he performs directly upon it; e.g., 'he made it fall in drops from his hand.' The pair of Kota verbs is *čot-* and *čotč-*." Emeneau does not follow the Western definition of a transitive; he analyses the Dravidian system on the basis of the distinctive transitive suffixes which transform an intransitive into a transitive. A transitive stem is formed from an intransitive by the addition of a transitive suffix. Many others, both Indian and Western linguists, have followed the syntactic model to determine transitivity. But Emeneau, as early as 1944, formulated a descriptive and structural model for the Dravidian transitives instead of imposing a Western model on the Dravidian languages. He (1944, 1967: 79) recognises the causatives too: "... which indicates that the actor causes the action to happen through some mediacy, usually that of another actor." The three fold opposition intransitive: transitive: causative is found in Kota as it is found in the other South Dravidian languages. Emeneau is a good

example for a new trend in the study of transitives in Dravidian. He (1961: 66-72) follows the same model in his description of the transitives of Kolami, a Dravidian language.

T. BURROW and S. BHATTACHARYA (1970)

Both the authors (1970: 87-89) use the terms intransitive-transitive pairs and Non-Periphrastic Causatives and give emphasis to the verbal base which is converted from intransitive to transitive by a number of processes. The model followed here is descriptive and is based on the perception that the intransitive-transitive pairs of stems are identifiable on the basis of morphological processes. Like L.V. Ramasamy Iyer they too use the term causative-transitive for the causatives (1970: 88). The emphasis is not on the capacity to take an object.

LEHMAN (1989)

Thomas Lehman (1989) does not deal with the transitive and causative suffixes. His causative auxiliaries (1989: 219) deal with periphrastic auxiliary constructions such as *vantān* 'he came.' and *vara vaittān* 'he made someone to come.'

SANFORD B. STEEVER (1998)

Sanford B. Steever (1998: 216): "Verbs are inherently transitive or intransitive. Transitives are also formed by derivation." Steever's transitives, both inherent and derived, are based on the capacity to take an object. He recognises three categories: intransitive, transitive and causative. The derived transitives and causatives are marked by the corresponding suffixes. The causative verb needs three minimal arguments: agent 1 = causer, agent 2 = causee and object. Steever follows the standard terms used within Dravidian linguistics.

HAROLD SCHIFFMAN (1999)

The publication of Schiffman's *A Reference Grammar of Spoken Tamil* (1999) is an important milestone in the description of spoken Tamil. Unlike many other Western and Non-Western specialists of Dravidian languages, Schiffman not only uses the categories intransitive, transitive and causative, but also warns others about the indiscriminate use of these terms (1999: 61): "Most grammars of Tamil

have discussed the transitivity status of Tamil verbs as being essentially binary, i.e. either transitive or intransitive, i.e. as if this distinction were exactly parallel to that of English or some other Western language. Actually any cursory examination of the Tamil verb will reveal that the semantic distinction so clearly marked in the morphology, i.e. the distinction between pairs like *oodu* and *oottu*, which is usually glossed as 'run' vs. 'cause to run' or 'run of one's own volition' vs. 'run something' is not as simple when all the verbs of the language have been taken into account." Schiffman (1999: 76) gives also examples for the causative formation with the suffix *-vi* or *-ppi*.

MIKHAIL S. ANDRONOV (2004)

Contrary to our expectation, Andronov (2004) does not include this phenomenon in his extensive book on the Tamil grammar.

MALAYALAM GRAMMARIANS ON TRANSITIVE FORMATION TRADITIONAL MALAYALAM GRAMMARIANS

Līlātilakam

Līlātilakam, a fourteenth century Malayalam grammar on the definition of *Maṇippravāla* - a literary genre - is a treatise on poetics. Very few observations are made about the language. Verb morphology of Malayalam is almost left out. Intransitives, transitives and causatives are neither defined nor described in this work. In his meta language he makes use of transitives and causative. But we could not find them back in his grammar as separate categories. Though the author is aware of the structure of Tamil and Malayalam, and the mixture of these two languages in the poetic style known as *pāṭṭu*, his meagre description of these two languages avoids transitives.

Kēraḷa Pāṇinīyam

Rajarajavarma (1896¹, 1917²), the author of *Kēraḷa Pāṇinīyam*, does not explicitly recognize the opposition among intransitive, transitive and causative. He divides the verbs into *kēvala* (simple) and *prayōjaka* (causative). See *kārika* 85. For example, *ōṭuka* 'to run' is *kēvala* and *ōṭikka* (to cause to run) is *prayōjaka*. He further divides the verbs on the basis of the presence of the non-causative suffix *-kku-* in forms such as *naṭakkuka* 'to walk'. Such verbs are called as *kāritas* and

the others as *akāritas*. This division is similar to the *balakriya* (strong verb) and *abalakriya* (weak verb) of Gundert (see further below).

Rajarajavarma discusses after the *kārika* 95 the base form of a verb and the changes in the base form according to the different verbal derivations dealing with, for example, causativization, tense, manner etc. Here he mentions about the *prakṛti* of a *dhātu*, which are *kēvala* 'simple' and *prayōjaka* 'causative'. A verb such as *bharikkuka* 'to rule' is simple and *bharippikkuka* 'to cause/make someone to rule' is causative. In a causative construction there are two *kartās* 'agents': the one who causes *prayōjaka kartā* and the one who executes *prayōjya kartā*. Rajarajavarma is interested in the syntax of such causative constructions. The presence of the real causative suffix such as *-ppi-* has attracted his attention. The intransitive and transitive opposition such as *cēruka* 'to join' and *cērkkuka* 'to make something join' and *ōṭuka* 'to run' and *ōṭikkuka* 'to make someone run' did not attract his attention. He brings such formations under the simple verb. If we follow the classification of Rajarajavarma, then a verb like *koṭukkuka* has a causative suffix *-kku-*, but it is used here in a non-causative sense. He does not prefer to name such verbs as strong verbs in the tradition of Gundert. The main problem is created by the absence of the recognition of the opposition intransitive, transitive and causative in verbs such as *naṭakkuka* 'to walk', *naṭattuka* 'to make someone walk' and *naṭattippikkuka* 'to cause someone to walk'.

The division such as simple and causative is in reality a division between intransitive and transitive. The causative of the transitive form *ōṭikka* is *ōṭippikka*. Rajarajavarma does not deal with this kind of causatives. However, there is no systematic treatment of the opposition intransitive, transitive and causative. He does not recognize a new grammatical category in these forms in spite of a semantic difference between *ōṭikka* and *vāyippikka* and the presence of the suffix *-ppi-* along with *-kka-*. His use of the term transitive is shrouded in mystery. It certainly does not point to oppositions such as *varu-* 'to come' and *varuttu-* 'to make something to come'.

MISSIONARY AND COLONIAL MALAYALAM GRAMMARIANS HERMANN GUNDELT (1851)

Hermann Gundert (1851¹, 1868²), a Basel Mission missionary born in Stuttgart, Germany, has produced one of the best grammars of

Malayalam ever written by a Westerner. He spent a major part (1836-1859) of his life in South India and lived from 1839 to 1859 in the cities like Tellicherry and Ciraykkal in Kerala. He earned his Doctorate from the University of Tubingen, Germany.

In his extensive grammar of the Malayalam language he often follows the Tamil grammatical terminologies and method of description. It is known that he was a follower of the Tamil missionary grammarian Beschi who is also known as Vīramāmunivar. Almost at the end of the description of the Malayalam verb morphology he writes about the formation of the Malayalam verb stems, where he includes the formation of causal verbs (see 297.d. causal verbs). He avoids the terminology transitive. The formation and meaning of causal stems are described in seven sutras:

1. By lengthening the root vowel such as *taññuka* vs. *tāññuka*.
2. By converting a weak verb into a strong verb:
 - a. by ending in *-kku* such as *āku* vs. *ākku*.
 - b. by converting *ññ* to *kk* such as *aṭaṇṇu* vs. *aṭakku*.
 - c. by adding *-kk-* such as *keṭu* vs. *keṭukka*.
 - d. by adding *-kk-* such as *vaḷar* vs. *vaḷarkka*.
 - e. by adding *-kk-* such as *nana* vs. *nanekka*.
3. By the addition of the suffix *-ttu-* to the weak and strong verb roots:
 - a. verbs like *nikattu*.
 - b. roots ending in *r*, *l* etc.: *varu* vs. *varuttu*, *vaḷar* vs. *vaḷarttu*, *vīlu* vs. *vīluttu*, *tālu* vs. *tāluttu*, *kamil* vs. *kamilttu*.
 - c. roots like *peṭa* vs. *peṭukka*, *peṭuttu*, *cel* vs. *celuttu*, *koḷ* vs. *koḷuttu*, *tuṛu* vs. *tuṛuttu*.
 - d. roots like *vāṭu* vs. *vāṭuttu*, *kūṭu* vs. *kūṭuttu*, *kāṇu* vs. *kāṭuttu*, *uṇ* vs. *ūṭuttu*, *vīḷu* vs. *vīṭuttu*, *urūlu* vs. *urūṭuttu*.
 - e. roots like *āru* vs. *ārru*, *ēru* vs. *ērru*, *tin* vs. *tīrru*, *njēlu* vs. *njērru*, *akal* vs. *akarru*.
 - f. roots like *kayo* vs. *kāccu* (*kāyttu*).
4. Creation of stems ending in *-ikka* with the help of *-ppu* and *-vu*:
 - a. such as *kakka* vs. *kappikka* in the strong verbs.

b. such as *ari* vs. *arivikka*, *ariyikka*.

c. for the rest of the strong verbs the suffix *-ikka* is enough:

kāṇ vs. *kāṇikka*, *col* vs. *collikka*, *vāl* vs. *vālikka*.

5. For some verb roots the causative is formed in two or three manners:

kāṇ vs. *kāṇikka*, *kāṭṭuka*, *kāṭṭikka*;

naṭakka vs. *naṭattuka*, *naṭattikka*, *naṭappikka*;

varika vs. *varuttuka*, *varuvikka*, *varuttikka*;

aṭaṇṇu vs. *aṭakki*, *aṭakkippiccu*

For causatives Gundert gives more examples like *ceyyippiccu*, *ceyyiccu*, *kollippiccu* and *keṭṭippikka*. However, here hides an important problem. His examples miss the real transitive formation because no transitive suffix is added to the root, instead a causative suffix. I have classified the verbs as intransitive, transitive and transitive-causative. In the case of the verbs which miss the three-dimensional contrast, the causative suffix functions as transitive suffix. Gundert does not differentiate between the transitives and causatives. He uses the term causatives for both transitives and causatives. Gundert consciously uses the terms intransitive and transitive in the case of the formation of verbs in Malayalam based on Sanskrit roots. See 308.a. where he describes "Transitive and Intransitive Bearings" of such formations. He observes that these verbs formed from Sanskrit nouns have both transitive and intransitive meanings. As examples he quotes *enikku labhiccu* 'I got.' and *bhartāvine labhikkum* '(She) will get a husband.' The formation *labhikka* is used in the former as intransitive and in the later as transitive. It is evident that his definition of transitive is closely related to the ability of the verb to take an object, as in the European grammatical tradition.

6. There are also some irregular formations:

Instead of the causative form *vālikka* sometimes the irregular form *vālunnīttituka* is also found.

7. This category does not deal with a causative formation; it is about the meaning of some of the causatives. Gundert observes that many causal verbs have intransitive meanings. He quotes examples such as *nurumpiccu*, *minniccu*, *poṭṭiccu*, *vaikiccu*, *njaalicca* and *konjnjiccu*.

Another context where Gundert uses the terminologies intransitive and transitive is when he describes the division of verbs (see section 196). First the verbs are divided into strong and weak. Strong verbs are marked by the suffix *-kku* in the stem and weak verbs are marked by the suffix *-ku* or without it. Examples for strong verbs are *irikka*, *koṭukka* and *kēḷkka*. Examples for weak verbs are *pōku* and *keṭu*.

Verbs are further divided into intransitive and transitive on the basis of meaning. One is *tanvina* which is intransitive and the other is *puravina* (sic!) which is transitive. Examples for intransitive are *irikka* and *varika*. Examples for transitives are *tarika* and *koṭukka*. He mentions further that the intransitives are mostly weak verbs and the transitives are strong verbs. Gundert uses the Tamil terms *tanvinai* and *piravinai* as intransitives and transitives, respectively. Gundert follows, on the one hand, the European tradition of strong and weak verbs and, on the other hand, the Tamil tradition of *tanvinai* and *piravinai* for intransitives and transitives. It should be mentioned that the Tamil grammatical tradition does not use *tanvinai* and *piravinai* for intransitive and transitive.

Another interesting point is the place where Gundert describes the causatives. He deals with them almost at the end of the description of the verb morphology and within the topic verb formation. Gundert describes causative formation as part of the stem formation.

JOSEPH PEET (1860)

Joseph Peet (1860) brings under one heading 'causal verbs' (1860: 78) both transitive and causative formations. According to him the causal verbs correspond to the English compound verbs such as 'to make to do' and 'to cause to assist'. In a foot-note (1860: 78) he refers to the transitive verbs "as the causals of their corresponding intransitives because many verbs have but two forms: where there are three, the rules of the formation of the causals, will show how they are made, so that no mistake can occur." The semantic difference between 'to make' and 'to cause' is not translated into categorical difference transitive and causative, respectively. He does not introduce a separate category as transitive. However, he describes the following five formations of causal verbs, which include transitive and causative formations: 1. suffix *-ppi-*; 2. suffix *-kk-* as in *ākunnu* 'to be' vs. *ākkunnu* 'to make' and *muṇṇunnu* 'to sink' vs. *mukkunnu* 'to make sink'; 3. suffix *-ikk-* as in *parayunnu* 'to

say' vs. *parayikkunnu* 'to cause to speak'; 4. suffix *-kk-* and *-tt-* as in *cērunnu* 'to be joined' vs. *cērkkunnu* 'to put together', *uṇarunnu* 'to be awake' vs. *uṇarttunnu* 'to awaken' and 5. change of *-ṇṇ-* to *-tt-* as in *uNNunnu* 'to eat rice' vs. *ūttunnu* 'to cause to eat rice'.

Though I have tried to bring them under these five groups, Peet mixes them when he gives more examples (1860: 78-80). His method of classification is based on the ending of the present indicative form of the verb. It is a known fact that this does not determine the transitive or causative formation. Peet, a European grammarian, follows the Western definition of causative without even paying attention to the transitives.

MATHAN (1863)

George Mathan (1863) wrote his grammar of the Malayalam language earlier than 1863; but it was at last published only in 1863. Mathan divides the verbs as *akarmaka* (intransitive), *karmaka* (transitive), *kāraṇikriya* (causative) and *karmaṇikriya* (passive). Mathan defines them by using semantic and structural changes. For example the verb *cāṭunnu* in a sentence like *kuraṇṇu cāṭunnu* 'The monkey jumps.' is *akarmaka* (intransitive). The verb *sikṣikkum* in a sentence like *pitāvu putrane sikṣikkum* is transitive. In the second example Mathan discovers two changes: 1. the change passes from the subject to another and 2. the object takes an accusative case. Mathan follows here the European tradition of transitive. However, Mathan follows also the structural difference to define a transitive. When the same root takes two suffixes such as *-ka* and *-kkuka*, then the first is intransitive and the second is transitive such as *aṭeka* 'to close' (intransitive) and *aṭekka* 'to close something' (transitive). Verbs such as *kāṇ* 'to see' and *kāttuka* 'to show' and *paṭhikka* 'to study' and *paṭhippikka* 'to teach' are also transitive formations.

Mathan's description of *kāraṇikriyas* (causatives verbs) refers to the causative-transitive formations where the suffix *-ka* of intransitive is replaced by *-ikkuka* and the intransitive suffix *-kkuka* is replaced by *-ppikkuka*. He gives the following examples: *muṇṇuka* 'to plunge' and *muṇṇikkuka* 'to cause to plunge' and *naṭakkuka* 'to walk' and *naṭappikkuka* or *naṭattikkuka* 'to cause to walk or perform'. He mentions also about the direct and indirect objects of a causative verb. His description of the *karmaṇikriya* deals with a passive construction where the auxiliary verb *petu* is used for this purpose.

Rev. George Mathan is perhaps the first to make a three dimensional distinction among the intransitive, transitive and causative verbs. One of the main differences is the structural description of causatives unlike the other Western grammarians of Malayalam, who define on the basis of the ability to take an object. Very refreshing is the description of the transitives and causatives.

F.W. ELLIS (1878)

Ellis does not deal with the transitives, though he (1878: 280) illustrates the past tense formation in Tamil and Malayalam with a transitive verb stem *nīkku-* 'to remove'. His implicit conception of transitive is based on the stem and therefore, perhaps in his view, there is no need to describe it separately.

L.J. FROHNMEYER (1889)

L.J. Frohnmeyer (1889) recognizes the contrast between the intransitive and transitive forms like *ākuka* and *ākkuka*. He points out (1889: 120) that *ākkuka* 'to make' is the transitive form of *ākuka* 'to become'. However, his division is based on the basis of an object as in English (1889: 121). If the verb can take an object, then it is transitive. When he lands in difficulty, he mentions further that "we see a strong Verb may be as well Transitive as Intransitive (*koṭukka*, *naṭakka*) and a Weak Verb too is not always Intransitive (*maṭaṇṇuka*, *ceyka*, *vāṇṇuka*). Some verbs may be used transitively as well as intransitively (just so in English)." On the one hand he recognizes (1889: 121) the contrast between intransitive (*keṭuka* 'to be ruined'), transitive (*keṭukku* 'to ruin') and causative (*keṭupikka* 'cause to be ruined, to make one ruin') and on the other hand his concept of transitive is based on the ability to take an object following the European tradition. He does not present a complete description of all the transitive forms or suffixes. Even though his European definition of the Malayalam transitive fails to explain the grammatical system of Malayalam, he sees it as the same as in English.

MODERN MALAYALAM GRAMMARIANS

WESTERN GRAMMARIANS

R.E. ASHER (1997)

Asher and Kumari (1997: 197-198) point out that the subject of an intransitive or of a transitive verb is expressed by a noun or pronoun

in the nominative case. Asher and Kumari (1997: 272-285) describe the transitive and causative formation in Malayalam and the morphological and syntactic problems involved in these formations. Though they do not define the terminologies transitive and causative in the Malayalam context, it is clear that they use the term transitive both for the syntactic transitive (taking an object) and for the morphological transitive formation. The term causative is used only for the constructions formed with the causative suffixes. From their description that verbs may be inherently intransitive or transitive (1997: 272), it is obvious that this is based on the capacity to take an object as in the Western grammars. They point out that transitives are formed by the morphological changes which take the form of either modification of the final consonant of the verb root or by the addition of a causative suffix. Thus intransitive, transitive and causative can be formed from the same verbal root (1997: 273). Malayalam shows three formations: intransitive, transitive and causative from the same root. Intransitive is not marked. Transitive and causative are marked by morphological suffixes. Asher and Kumari distinguish between transitive and causative formation on the basis of distinctive suffixes, for example *tuvarunnu* (*tuvar* + *unnu*, Root + PRES), *tuvartti* (*tuvar* + *tt* + *i*, Root + TRANS + PAST) and *tuvartticcu* (*tuvar* + *tt* + *i* + *ccu*, Root + TRANS + CAUS + PAST). The root *tuvar* means 'to dry'. Syntactically the subject of an intransitive verb becomes the object of a transitive verb and the subject of a transitive verb becomes an object or a noun with the instrumental case of a causative verb. The concept causativity in Dravidian is unique and is different from the usage of this terminology in Indo-European. Often the Malayalam derived transitive is called as causative in the background of Indo-European. However, this is not correct. It is better not to impose the Indo-European tradition on Dravidian.

Moag (1980) recognises intransitives, transitives and causatives like all the other modern linguists. He identifies the transitive and causative suffixes.

INDIAN GRAMMARIANS

L.V. Ramaswami Aiyar (1936: 51) and A.C. Sekhar (1953: 103-104, 137-145) maintain the terms intransitives, transitives and causative-transitives. Both of them describe how the transitive and causative stems are formed by the addition of suffixes and by processes

such as doubling. Aiyar follows the same methods which he used for describing the Tamil transitives and causatives. A.C. Sekhar (1953) follows the modern linguistic methods for the inventory of transitive and causative. K.M. George (1971) follows also the modern linguistic methods for identifying the transitive and causative suffixes. They do not give much importance to the grammatical terminology. All of them consider transitives as an extended stem with a transitive suffix.

The long list of authors who have contributed to this subject cannot be exhausted in this paper. An attempt is made to select a number of native and foreign contributions through the centuries to understand the historiography of this interesting phenomenon. A future publication will try to include more authors in order to confirm whether the picture drawn in this paper is complete or not.

A SHORT HISTORY OF NAMING THIS PHENOMENON

Some of the Tamil grammarians and commentators name this phenomenon as *tanvinai* and *piravinai*. *Tolkāppiyam* and *Nannūl* do not use these terms. The earliest Tamil Sangam literature is full of different types of transitive and causative constructions. V.S. Rajam (1992: 523-533) refers to all the possible transitive and causative constructions in the classical Tamil poetry such as *ūṭṭi* 'having fed', *perukki* 'having caused to multiply', *cūṭṭi* 'having made to wear', *ākki* 'having made', *kiṭappi* 'after laying down' and *koḷuvi* 'having made (the lamp) to receive'. It is strange that the earliest extant Tamil grammar as well as the later *Nannūl* remain silent about this important derivative formation. The commentators on *Tolkāppiyam* (Naccinārkkiniyar, 14th cent.) and *Nannūl* (Saṅkaranamacciavar, 17th cent.) employ the terms *tanvinai* and *piravinai* to distinguish the verbs with single and geminated consonants (Paramasivam 1979: 35). The author of the seventeenth century Tamil grammar *Ilakkaṇakkottu* uses the term *tanvinai* for the verbs with a single consonant, and the term *piravinai* for the verbs with a geminated consonant or a causative suffix.

Paramasivam (1979: 38) makes the following remarks about the naming of this phenomenon: "Non-native writers, from the early missionaries to modern linguists, have stated that the "transitives" are causatives of the corresponding "intransitives". Thus, Rhenius (1836: 113) explains the formation of "active or causal verbs" from certain

roots. Hoisington (1853: 395)) talks of "another causative form....by means of which intransitive verbs become transitive." Pope (1855: 28) talks about "the transitive or causal signification". Among modern writers, Schiffman (1974: 14-15) draws the conclusion that "the basic layer is 'X happens of its own volition;' the second is 'Y causes X to happen,' X bring a verbal notion." Such characterizations are also found in native writings. Terms like "this form of causals (or derived transitives)" (as in Ramaswami Aiyar, 1928: 167), "transitivo-causative" (as in Ramaswami Aiyar 1939: 169), etc., have been used. Paramasivam (1979) suggests the terminologies affective, effective and causative (-*vi-* and -*pi-* constructions) instead of intransitive, transitive and causative, respectively.

DRAVIDIAN AND INDO-EUROPEAN

The problem of the transitives in Tamil and Malayalam is different from the problem and definition of transitives in the Indo-European and Indo-Aryan languages. Many verbs take a direct object. A verb like *koṭu-* 'to give' takes a direct object. It has no intransitive-transitive contrast like *nīṅku-* 'to leave' and *nīkku-* 'to remove', where both of them take direct objects. In the case of intransitive the subject does the action and in the case of the corresponding transitive the subject makes the object to do the action. Specialists in the Indo-European and Indo-Aryan languages name such forms as causatives. Since the Dravidian languages have one more opposition with a causative suffix, it is customary to use the three categories to distinguish these three derivations. The intransitive is unmarked. The transitives and causatives are marked by separate suffixes. The following examples show the tripartite phenomenon: *naṭantān* 'he walked', *naṭattinān* 'he made someone to walk.' and *naṭattuvittān* 'he caused someone to make someone walk.' Such a phenomenon cannot be defined on the basis of the capacity of a verb to take a direct object alone. In all these constructions the subject does an action; however, in an intransitive the subject itself does the action; in the transitive the object does the action and the subject is an inducer and in a causative the subject induces one object to induce another object to do the action. In other words the subject commands one object to make the second object to do the action. Because of this distinction a tripartite division is made to correspond to the three actions. The significance of these three divisions may be eclipsed if one

names them as causative I and causative II or transitive I and transitive II. The phenomenon which is named as transitive in Dravidian is different from the phenomenon which is named as transitive or causative in Indo-European or Indo-Aryan. A unique morphological process distinguishes these three categories and defines very clearly who ultimately executes an action. It should be mentioned here that even the verbs which are devoid of an intransitive and transitive pair, take the causative suffix. In such cases the causative takes over the function of a transitive. Such verbs have only an intransitive and causative contrast.

Much confusion exists in the use of the terms transitive and causative in Dravidian and Indo-European. The Dravidian transitive and causative formations are marked by distinct morphological processes corresponding to distinct semantic differences. It is not based on the syntactic possibility of a verb's capacity to take an object. The distinct semantic differences such as the subject executing an action or inducing the object to execute an action or commanding another object to execute an action through another object, characterise the Dravidian transitive and causative formations. Only when a verb stem has two or three oppositions such as *naṭa-* 'to walk', *naṭattu-* 'to make someone walk' and *naṭattuvi-* 'to cause someone to make someone walk', it is possible to identify a transitive or a causative. Such a phenomenon does not exist in Indo-European, and therefore it is not correct to equate the Indo-European definition of transitive with the definition of transitive or causative in Dravidian.

DISCUSSION

Structurally the transitive and causative suffixes occupy a place immediately after the verb root or stem. Dravidian is highly explicit in expressing grammatical features through distinct morphs. Since action, time and subject are the three important components of a Dravidian verb, and because the transitive and causative suffixes are glued to the stem, many of the ancient grammarians might have seen this as a feature of the stem instead of an analysable morph feature such as tense or person, number and gender markers. Strangely enough the transitive and causative suffixes are used in the meta language of the ancient grammarians themselves. We have seen that a syntactic definition based on object alone, as in Indo-European, will not serve the description of

Dravidian. It is improper to describe the Dravidian transitive and causative constructions with the tools of Indo-European grammatical models. These categories cover different features in these two language families.

The earlier attempts to recognise this phenomenon are reflected in the use of the Tamil terminologies *tanvinai* 'act of oneself' and *piravinai* 'act of another'. The Western missionary grammarians as well as the traditional Tamil and Malayalam grammarians used them to describe the grammatical features intransitive and transitive. While the Tamil grammars *Tolkāppiyam* and *Nannūl* are silent about intransitive and transitive, the Sanskrit based *Viracōliyam* points to this important Tamil feature. Sanskrit model of grammatical description induced a comparison with the structure of Tamil. The Sanskrit oriented commentators of *Tolkāppiyam* (e.g. Naccinārkkiniyar, 14th cent. A.D.) and *Nannūl* (Sāṅkaranamacciavayar, 17th cent. A.D.) use the terms *tanvinai* and *piravinai* when they refer to the single and geminated consonants in verbs. Gemination is one of the processes to differentiate a transitive from an intransitive. We have also seen that *Ilakkaṇakkottu*, a grammar of the 17th cent. A.D., is the first to name a class of verbs with single consonant as *tanvinai* and a class of verbs with geminated consonants or with the causative suffix as *piravinai*. However, the author mistakenly mixes up the transitives with the causatives.

The missionary grammarians had a good knowledge of Latin and Indo-European grammatical traditions. We shall discuss below their views regarding the Dravidian transitives and causatives. The historiography of transitives and causatives shows the varying perceptions of this important phenomenon. The missionary grammarians reflect six of such perceptions:

1. C.J. Beschi (1728¹, 1848²) does not use the terms intransitive, transitive and causative. However, the transitive formation is partly and indirectly described in the section on the past tense and the causative formation is described in the section (132) on "Verbs of Command".
2. The German Missionary grammarian Rhenius (1834: 79), like the British Arden, relates the strong verbs with gemination and the weak verbs without gemination with transitive and intransitive, respectively. Doubling of consonants plays an important role in his descriptions.

3. Pope (1855: 46-47) uses the terms weak and strong verbs for the same phenomenon and added that the weak verbs are generally intransitive and the strong verbs are mostly transitive.

4. Caldwell (1856: 449) recognises the distinction between intransitive, transitive and causative and even translated the Tamil grammatical terms *tan-* and *piravinai* as intransitive and transitive, respectively, and pointed out a possible correspondence with the Sanskrit *ātmanē-padam* and *parasmai-padam*. However, he is quick to show the dangers of such a comparison. Caldwell is aware of the morphological changes taking place in a verb stem and its immediate suffix. With the arrival of the missionary grammarians the tendency to identify and name a grammatical process increases.

5. Arden (1891) relates the strong and weak verbs with transitive and intransitive, respectively. He (Reprint 1969: 168) struggles, like the Indo-Europeanists, between transitive and causative. The strong verbs are 'causal verbs'. Arden considers all the transitives where the transitives are formed by changes in the stem, as causatives. Arden involves also the object in his description of transitive. Arden follows in the first place the definition based on the capacity to take an object. Further when he describes the derived transitives, he points out the distinguishing feature gemination. Arden is one of the first European grammarians, who argues with reasons the need for a transitive category in Tamil though there are some confusions between transitive and causative in his approach.

6. The German missionary grammarian Hermann Beythan (1943: 116-117) brings the phenomenon of transitive and causative formation under one heading "Das Kausativum". He does not use the term 'transitive'. He recognises the various transitive formations based on suffixes and processes. On the one hand he follows the Indo-European model and on the other hand he recognises that it is a morphological category.

Modern Indian Tamil grammarians like Ramaswami Aiyar, who have a sound basis in the traditional grammars and are also quite aware of the modern linguistic models of language descriptions, combine the traditional and Western methods for the recognition and description of transitives and causatives. His (1938, 1939) method of determining transitivity on the basis of an object, and in the second place based on a

morphological process of converting the intransitives to transitives, is an ample evidence of the rise of new grammarians. At the same time, he is also in a dilemma when the object oriented transitive verbs are again transitivised by a derivational suffix. The term causative is reserved for the transitive formation with the suffixes *vi*, *pi* and *ppi*, which he names as "the so-called causative-denoters" (1930: 173). It is also significant that he equates the transitives with the traditional *piravinai*. In his earlier article (1938) he prefers the term causative instead of transitive. However, he (1938: 752) describes this phenomenon as 'causativo-transitival formation'. Following the Western model he even names some of the verbal bases with a formative suffix *-kk-*, such as *etukka* and *kulikka*, as transitives.

We follow a remarkably deviating approach in the publication of T.P. Meenakshisundaram (1965: 110-111). He sees the contrast between transitive and intransitive as the difference between ergative and non-ergative. He (1965: 111) denies the distinction between transitive and intransitive: "Once again, it has to be emphasised that the distinction in Tamil is not between transitive and intransitive but only between ergative and non-ergative." We have discussed earlier why we cannot agree with his views. Interesting is his object-based definition of verb phrases which can be intransitive or transitive.

A visionary approach to the current problem is seen in the publication of K. Paramasivam (1979: 20). He prefers the terms effective and affective instead of intransitive and transitive or *tanvinai* and *piravinai*. In an intransitive the action affects only the subject and in a transitive the subject effects an action on an external object. In both the cases the object plays an important role.

Bh. Krishnamurti (2003: 279) follows the Western definition of a transitive, i.e., the capacity to take an object. He states (2003: 279): "A simple verb may be inherently intransitive (**ā-* 'to be') or transitive (**ciy-* 'to give') depending on its meaning and its relationship with the complement phrases in a given clause." P.S. Subrahmanyam (1971: 1-101 and 2008) defines transitive on the basis of the capacity to take an object and at the same time describes also transitive and causative formation.

Modern Western Tamil Grammarians, like Jules Bloch (1946: 48-50), following the European tradition, uses the term 'causative' for

transitives as well as causatives. Sanford B. Steever (1998: 216) uses the object-criteria to define an inherent transitive and the derivative suffixes to define a derived transitive. Steever's transitives, both inherent and derived, are based on the capacity to take an object. Steever follows the standard terminologies used within Dravidian linguistics. Harold Schiffman (1999) is one of the important authors who make a distinction between intransitive, transitive and causative. At the same time warns against the indiscriminate use of Western definition of transitive and causative in the context of Dravidian.

Early Malayalam grammarians such as the author of *Līlātilakam* do not pay any attention to the present problem though the author makes use of transitives and causatives in his meta language. Rajarajavarma (1896¹, 1917²), in his Malayalam grammar *Kēraḷa Pāṇinīyam*, does not recognise the opposition among intransitive, transitive and causative. We do not find a systematic treatment of the transitives. He maintains an opposition between simple and causative. Influence of Sanskrit can be seen in his description of the causatives.

Hermann Gundert (1851¹, 1868²), the missionary grammarian of Malayalam, is hesitant to use the term transitive. Instead he uses the term causative when he describes the formation of transitives. Gundert does not differentiate between the transitives and causatives. Gundert consciously uses the terms intransitive and transitive in the case of the formation of verbs in Malayalam based on Sanskrit roots. He observes that these verbs formed from Sanskrit nouns have both transitive and intransitive meanings. Influence of Indo-European and Sanskrit can be seen in his treatment of Malayalam. Joseph Peet (1860) brings under one heading (1860: 78) 'causal verbs' both transitive and causative formations. George Mathan (1863) divides the verbs as *akarmaka* (intransitive), *karmaka* (transitive), *kāraṇikriya* (causative) and *karmanikriya* (passive). Rev. Mathan is perhaps the first to make a three dimensional distinction among the intransitive, transitive and causative verbs. One of the main differences is the structural description of causatives, unlike the other Western grammarians of Malayalam, who define on the basis of the capacity to take an object. Very refreshing is his description of the transitives and causatives. Frohnmeyer (1889: 120) recognizes the contrast between the intransitive and transitive forms like *ākuka* and *ākkuka* in Malayalam. However, his

division is based on the basis of an object as in English (1889: 121). He follows the Indo-European model.

Modern Malayalam grammarians such as Asher and Kumari (1997: 272-285) describe the transitive and causative formations in Malayalam and the morphological and syntactic problems involved in them. On the one hand they follow the Indo-European definition of a transitive and on the other recognise the morphological changes involved in transitivity. Sekhar (1953), George (1971) and Moag (1980) recognise the morphological importance of transitive and causative formations.

CONCLUSION

The historiography of transitives in Dravidian shows six phases of developments, of which some of them overlap. The grammarians who have enriched our grammatical heritage come from different countries and have different academic training. Some of the grammarians had training in the Sanskrit tradition and some others in the European tradition. However, there are also tendencies to combine these two traditions. Some of them consider the transitive as the problem of the verb stem, and others treat this as an identifiable grammatical feature expressed by suffixes or grammatical processes. The earliest indigenous grammars completely neglect this important subject. They lay emphasis on the stem, tense and personal endings. Since the stem can be transitive, there was, perhaps, no need to highlight the transitivity. Transitivity is not recognised as an independent verbal feature. However, the indigenous Tamil grammars which follow the Sanskrit model, have a tendency to distinguish transitivity and causativity. The commentators of the Tamil grammars, who are aware of the Sanskrit tradition, recognise the transitivity of the Tamil verb.

The second phase is the syntactic definition of a transitive, which is closely related to the ability of the verb to take an object. Any verb stem which can take an object becomes a transitive. This model follows the European method of linguistic description. The strong and weak verbal pairs which show the doubling of the consonant in the strong verbs, also belong to this phase. The strong verbs are identified as transitives because they can take an object. Many of the missionary

grammarians have followed this model. However, this model completely disregards the agglutinative character of the Dravidian languages and fails to analyse them adequately.

The third phase is the recognition of the Dravidian transitives as causatives. Gundert and Joseph Peet are the best examples for this stream of grammarians. On the one hand, Gundert reserves the term transitive, like the Western grammarians, for the syntactic transitive, and on the other hand, on the basis of the identifiable suffixes and processes, calls the Dravidian transitives as causatives. Gundert shows also his knowledge of the traditional Tamil grammar.

The fourth phase shows a combination of the approach of the later Tamil traditional grammarians and the Western orientation. Caldwell is an extraordinary representative of this phase. They are aware of the Tamil and Sanskrit traditions, and at the same time, try to identify the suffixes and the processes involved in transitivity. Some of the pre-modern Indian grammarians such as Ramasamy Aiyar, who had a good training in the Tamil and Sanskrit traditions, belong to this group as well.

The fifth phase is the recognition of opposite pairs of the stems which reflect intransitive and transitive features. The transitive feature is associated with explicit suffixes or processes.

The sixth phase is the phase of modern linguistics. Even in this phase there is a tendency to follow the syntactic definition combined with the recognition of identifiable and separable transitive suffixes and morphological processes such as the doubling of certain plosive consonants. Asher and Krishnamurti fall in this group of linguists. This model identifies the simple and derived transitives - the former on the basis of an object and the latter on the basis of suffixes and processes. In between, a few innovative scholars like Paramasivam, Emeneau and Meenakshisundaram, gave emphasis to the subject in their description of transitive.

Confusion was created by the Indo-Europeanists who see the Dravidian transitive as causative. Some of them suggested the term Causative-I for transitive and Causative-II for causative. Such suggestions reflect a total disregard for the morphology and semantics of Dravidian transitive and causative.

BIBLIOGRAPHY

Andrewskutty, A.P. 1972. "Intransitive and Transitive Verbs in Malayalam" in *Indian Linguistics* 35: 44-50.

Andronov, Mikhail S. 1996. *A Grammar of the Malayalam Language in Historical Treatment*. Wiesbaden: Harrassowitz Verlag.

----. 2004. *A Reference Grammar of the Tamil Language*. Muenchen: LINCOM GmbH.

Annamalai, E. 1985. *Dynamics of Verbal Extension in Tamil*. Trivandrum: Dravidian Linguistics Association of India.

Arden, A.H. 1891¹, 1954⁵. *A Progressive Grammar of Common Tamil*. Madras: The Christian Literature Society.

Asher, R.E. 1966. "The Verb in Spoken Tamil" in *In Memory of J.R. Firth*. London: Longmans. 15-29.

----. 1968. "Classification of Tamil and Malayalam Verbs - A Comparative Study" in *Dravidian Linguistics* (Seminar Papers). Annamalainagar: Annamalai University. 249-268.

---- & Kumari T.C. 1997. *Malayalam*. London: Routledge.

Beschi, C.J. 1728¹, 1848². *A Grammar of the Common Dialect of the Tamul Language*. Translated from Latin by George William Mahon. Vepery: Christian Knowledge Society's Press.

Beythan, Hermann. 1943. *Praktische Grammatik der Tamilsprache*. Leipzig: Otto Harrassowitz.

Bloch, Jules. 1946. *Structure Grammaticale des Langues Dravidiennes*. Paris: Adrien Maisonneuve.

----. 1954. *The Grammatical Structure of the Dravidian Languages*. (Translated by R.G. Harshe). Poona: Deccan College Postgraduate and Research Institute.

Burrow, T & S. Bhattacharya. 1970. *The Pengo Language*. Oxford: At the Clarendon Press.

Caldwell, R. 1856¹, 1961³. *A Comparative Grammar of the Dravidian or South Indian Family of Languages*. Madras: Madras University.

Ellis, F.W. 1878. "Dissertation on the Malayāḷma Language" in *The Indian Antiquary* 7: 275-287.

Emeneau, M.B. 1944. *Kota Texts* 1.15 - 35. Berkeley: University of California Publications in Linguistics 2.

----. 1961. *Kolami - A Dravidian Language*. Annamalainagar: Publications in linguistics 2, Annamalai University.

----. 1967. *Collected Papers: Dravidian Linguistics, Ethnology and Folktales*. Annamalainagar: Linguistics Department Publication No. 8, The Annamalai University.

Frohnmeier, L.J. 1889. *A Progressive Language of the Malayalam Language*. Tellicherry. Reprint of the second edition of 1912 is published in 1979. Delhi: Asian Educational Services.

George, K.M. 1971. *Malayalam Grammar and Reader*. Kottayam: National Book Stall.

Graul, C. 1855. *An Outline of Tamil Grammar*, added to *Kaivalyanavanīta*. Leipzig: Bibliotheca Tamulica.

Grignard, A. 1924. *A Grammar of the Oraon Language*. Calcutta: Catholic Orphan Press.

Gundert, H. 1851¹ (incomplete), 1868², reprint 1991. *Malayāḷa Bhāṣāvyākaraṇam*. Kottayam: D.C. Books.

Henriques, Henrique. 1548-1564. *Arte da Lingua Malabar*. Lisbon: Manuscript kept at the Biblioteca Nacional. See further Vermeer, Hans J. Hoisington, Rev. H.R. 1853. "Brief notes on the Tamil Language" in *Journal of the American Oriental Society* 3: 389-397.

Israel, M. 1973. *The Treatment of Morphology in Tolkappiyam*. Madurai: Madurai University Publication No. 3.

Krishnamurti, Bh. 1971. "Causative Constructions in Indian languages: some semantic and syntactic aspects" in *Indian Linguistics* 32: 18-35.

----. 2001. *Comparative Dravidian Linguistics - Current Perspectives*. Oxford: Oxford University Press.

----. 2003. *The Dravidian Languages*. Cambridge: Cambridge University Press.

Lehman, Thomas. 1989. *A Grammar of Modern Tamil*. Pondicherry: Pondicherry Institute of Linguistics and Culture.

Mathan, Rev. George. 1863. *Malayālmayūṭe Vyākaraṇam*. Kottayam.

Meenakshisundaram, T.P. 1965. *A History of Tamil Language*. Poona: Deccan College.

----. 1974. *Foreign Models in Tamil Grammar*. Trivandrum: Dravidian Linguistics Association.

Moag, R. 1980. *Malayalam: A University Course and Reference Grammar*. Michigan: University of Michigan Press.

Natarajan, T. 1977. *The Language of Sangam Literature and Tolkāppiyam*. Madurai: Madurai Publishing House.

Paramasivam, K. 1979. *Effectivity and Causativity in Tamil*. Trivandrum: Dravidian Linguistics Association.

Peet, Joseph. 1860. *A Grammar of the Malayalim Language*. Kottayam: C.M. Press. Reprint of the second edition 1972. Osnabruck: Biblio Verlag.

Prabhakara Variar, K.M. 1982. *Pūrvakēraḷabhāṣa*. Madras: University of Madras.

Pope, G.U. 1855¹, 1859². *A Tamil Hand-book*. Madras: Printed and published by P.R. Hunt.

Rajam, V.S. 1981. *A Comparative Study of Two Ancient Indian Grammatical Traditions: The Tamil Tolkappiyam Compared with the Sanskrit RK-Pratisakhya, taittiriya-pratisakhya, apisali siksa, and the astadhyayi*. Ann Arbor: University Microfilms International.

----. 1992. *A Reference Grammar of Classical Tamil Poetry (150 B.C. - pre-fifth/sixth century A.D.)*. Philadelphia: American Philosophical Society.

Rajarajavarma, A.R. 1896¹, 1917². *Kēraḷa Pāṇinīyam*. Trivandrum.

Rajendran, S. & Thampuran, R.R. 1975. "Intransitive, transitive, and causative verbs in Malayalam" in *Bulletin of the Deccan College Research Institute* 35: 116-120.

Ramaswami Aiyar, L.V. 1928. "Causal Verbs in Dravidian" in *The Educational Review*, March 1928: 166-171.

----. 1936. *Evolution of Malayālam Morphology*. Trichur: The Rama Varma Research Studies No. 1.

----. 1938. "The Morphology of the Old Tamil Verb" in *ANTHROPOS* 33: 747-781.

----. 1939. "The Old Tamil Verb" in *The Quarterly Journal of the Mythic Society* 30: 163-174.

Rhenius, C.T.E. 1834, 1836. *A Grammar of the Tamil Language with an Appendix*. Madras: Printed at the Church Mission Press.

Roy, C.J. 1999. *Keerala Paaniniyyam* (English Translation). Trivandrum: International School of Dravidian Linguistics.

Schiffman, H.F. 1974. "Causativity and the Tamil Verb Base". Paper presented at the Texas Conference on verbs in India.

Schiffman, Harold F. 1999. *A Reference Grammar of Spoken Tamil*. Cambridge: Cambridge University Press.

Sekhar, A.C. 1953. *Evolution of Malayalam*. Poona: Deccan College. Dissertation series 10.

Steever, Sanford B. 1998. *The Dravidian Languages*. London: Routledge.

Subrahmanyam, P.S. 1965. The Intransitive and Transitive Suffixes of Kui. *Journal of the American Oriental Society* 89: 739-50.

----. 1971. *Dravidian Verb Morphology: A Comparative Study*. Annamalainagar: Annamalai University.

----. 2008. *Dravidian Comparative Grammar - I*. Mysore: Centre of Excellence for Classical Tamil, Central Institute of Indian Languages.

Subramoniam, V.I. 1963. "Malayalam Verb Classification". *Journal of the Kerala University Manuscripts Library* XII, 1 & 2: 85-98.

Thani Nayagam, Xavier S. Fr. 1954. "Tamil Manuscripts in European Libraries" in *Tamil Culture*. Madras. 3: 219-228.

Vermeer, Hans J. 1982. *The First European Tamil Grammar - A critical edition*. Heidelberg: Julius Groos Verlag.

A DESCRIPTIVE ANALYSIS OF A DIALECT OF TAMIL

V.I. Subramoniam, 2003, HB, Demy 1/8, pp. xiv+85, Rs. 170/- (US\$ 17/-)

The thesis used only by researchers in the Kerala University and later in the International School of Dravidian Linguistics, has come out now in attractive format. When voicing of the written script is now attempted in several centres, its acoustic study helps to determine the voicing of the Tamil sounds. A pathfinding thesis completed in 1957.

A HANDBOOK OF TAMIL NADU

K.M. Venkataramaiah (Ed.), 1996, HB, Demy 1/4, pp. vi+556+xiv, Rs. 1,000/- (US\$ 125/-)

Arranged alphabetically, this book covers most of the details on history, culture, language and literature, Saivism, Vaishnavism, Buddhism, Jainism, Christianity and Islam, and has pen-pictures of important personalities. Running to over 576 pages, with an appendix and index, it is intended not only for researchers as a ready reference but also as one catering to the needs of the common readers to know the land, people, history, culture, language and literature, and religion of Tamil Nadu through the ages.

VANJIKĀNDAM

K. Ravindran, 2008, PB, Demy 1/8, pp. x + 205, Rs. 200/- (US\$ 40/-)

The book is divided into fifteen chapters which include details of the Sangam period, archaeological sites, Roman trade, Vanchi, Chenkuttuvan, expedition to the Himalayas, Kannaki the Goddess, and People and Social Life. The people of Chera country had developed a civilization along with the Pandyas and Cholas of Tamilakam. Evidences from archaeological and numismatic sources may prove or supplement the literary sources.

GENES, GEOGRAPHY AND LANGUAGE

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Abstract

The capability to develop "LANGUAGE" as an abstract concept, and to structure rule-bound systems capable of being understood in a uniform cognitive pattern by groups of people subscribing to those systems is a distinctly human characteristic, universal among Homo sapiens sapiens. Specific languages are the creations of diverse groups of people who may or may not be genetically of the same stock. When arguing by analogies, we have to be careful against too close identifications. This paper cautions against hasty conclusions about the determinative role of certain mt DNA or Y-chromosome traits shared by a set of humans, on specific language "families". (A shorter version had been published in DLA News, Vol. 34, Nos., 2 and 3, February and March 2010 respectively.)

[**Note:** In the following, I use "Language" (i.e., with a capital L) in the singular to mean meta-linguistic aspects (like Grammar, etc.), common to all "languages" (i.e., individual languages like Malayalam, English, etc), and the human capability of communicating with other humans in his set that interacts with him by means of a system of signs and symbols interpreted in a more or less uniform cognitive pattern by most members of that set.]

Introduction: Probably because of overwhelming influence of Darwinian evolutionistic theories, terminology derived from literature on biological evolution was adopted to describe and classify languages. Linguistic "families" were classified according to "genetic" principles, understood in early days as morphological characteristics, certain common features

of grammatical structure, and derivability of terms and expressions from earlier forms available in some other languages that were linked on morphological similarities with other member languages of that "family". In fact, there was a recursive element in such derivations, commonality of features both indicating, as well as explaining membership of the "family". An "earlier form" was considered such because it had been attested in some literary production considered to have been chronologically earlier. Linguistics developed well-understood theories and procedures for such derivations.

Unlike in biological theories that were modified by discoveries of physiological common traits among different population sets, in linguistics, classification was mainly based on morphological examinations of comparative etymologies. Grammatical similarities were also examined for obvious similarities of structure. Such "phylo-genetic" studies were consistent with the fact that languages change faster than biological genes, and spread faster by progressive differentiation and human migration. "Mutation" is a comparatively rare incident in human biological evolution, but language change is an ongoing and frequent phenomenon in most "living" languages. But some authors (e.g., Cavalli-Sforza, Menozzi & Piazza 1996) have drawn an analogy between loss of inter-fertility that marks biological differentiation of species, and loss of inter-comprehensibility that marks differentiation among languages.

The Dimension of Geography: The veteran authority on Human Migrations throughout the world, viz., Cavalli-Sforza, (1996) found:

"It is reassuring ... that the patterns of linguistic variation in space parallel those of genetic and/or geographic variation.... There are in fact good a priori reasons why cultural and genetic pools have close similarities; both genetic and cultural contacts take place by the same routes; they respond to the same geographic and ecological barriers; and they also can influence each other...." (p. 23)

It is increasingly believed that "Modern" *H.s.sapiens* originated in Africa; but the mastery of food production favoured cultural innovation and a spurt in population growth, which in turn made them migrate worldwide. They travelled in many modes, by foot, by learning techniques

of building rafts and boats, and venturing out to sea in them; and after they had managed to tame animals, by riding on them. They travelled in bands and groups, establishing and maintaining specific identities that persisted because of in-breeding. But the in-breeding process was breached by fights for and capture of females between the groups. Cultural identities thus tended to become not necessarily co-incident with gene identities.

The Ability to Communicate: The ability to communicate information from one individual to another is not uniquely human. As is well known, "social insects" like honey-bees, ants, etc. have intuitive, genetically programmed abilities to communicate even complex information by distinctly repeated action sequences. These systems are not merely limited to sound or sight signals. Chemicals (pheromones) and olfaction (the sense of smell), and in some cases, tactile sensations communicate messages among various species of animal life. Animals like dogs modulate their sounds to express variations of reflexes and reactions.

But in the case of humans, evolution enabled them to adjust their senses and their capacity to use them in a variety of ways that were not anatomically available to other forms of life. The changes in the respiratory, laryngeal and supralaryngeal systems enabled humans to achieve a modulation of voice production far beyond what characterised the great apes. The development of various inter-communicating centres in the highly complex human brain responded to these changes, and produced "theories" and strategies for a greater variety of use of voice symbols for survival initially, and in course of time, for the dissemination of "thoughts" and emotions. These are certainly biological circumstances co-incident with the evolution of all humans as a genus with only one species.

Limitations of Argument by Analogy: Species and sub-species, as well as "varieties" in biological classifications are generally clearly distinguishable, and can be confirmed by deeper analysis of genetic structure. But in languages, dialects of a language show smaller reciprocal distances than with other languages, and the transition from one to another is continuous - a dialect may gradually merge with another contiguous to it either in space or time. In some "grey" areas, identification of a dialect as belonging to one language rather than to another may even be arbitrary. Languages spoken by millions of people spread over large

areas of the globe show no correlation with biological or societal features of the different sets of users of the same language - e.g., English is spoken by Caucasoids in Europe, by Caucasoids as well as Negroids and Mongoloids in America, and by all sorts round the world. Conversely, American Indians, though they are closest to Mongoloid strain of humanity, have languages constituted into a "family" distinct from the Chinese, who are also Mongoloid.

In his Foreword to Panikkar G.K. 1973: *Description of the Ernad Dialect of Malayalam*, DLA Publications, Thiruvananthapuram (p. iv), V.I. Subramoniam had noted that Historical and Comparative Linguistics had not taken the cue from the later developments in genetics about the treatment of change. He surmised that this was because Language is inorganic; the linguistic analogue of the gene is either non-existent or not yet identified.

"Language" and Languages: The difference between Language as a generalized, universal human capability, and of individual languages as specific creations of sets of humans in diverse locations and cultures, has been indicated in the literature on Language. Saussure differentiated among Language, *langue* and *parole*. Greenberg proposed certain features of all languages that were capable of being logically analysed as "universals". Chomsky revolutionized Linguistics by analyzing the "Universal Properties of Language" and tried to derive a single set of rules from which all grammatical sentences in any given language could be generated. He used the word "competence" to designate the human ability to go beyond the limitations of a corpus of meaningful sounds and symbols to derive a set of rules common to all of them. This, he (rightly) considered, as a human endowment, thanks to the evolution of the Brain structures of *H. sapiens sapiens*, which, of course, are gene-determined. This is common to all humans, and universal to all languages.

The Human Genome Project succeeded in mapping the inventory of genes of *H.s. sapiens*. It identified only around 30,000 genes. In other words, it is not possible that every variable cultural trait among humans can be traced to some specific gene or another. A vital difference between *H.s.sapiens* and the Great Apes was that about half of the 30,000 genes found in the former are selectively active in the structure, development and activity of the Brain. This feature is found among all

human populations, and is not specific for any specific variety of the species. No gene or set of them has been specifically identified as responsible for linguistic "competence" (in Chomskyan sense).

Lumsden & Wilson (2005:xlili-xliv) reported:

"FOXP2 is a gene that codes for a small protein that helps regulate gene function in the developing human. In 2002 ... (a study was reported) of a family in which half the members shared a mutation in this gene... (They had) a pronounced deficit in their ability to produce normally articulated speech, as well as specific difficulties in understanding language. The family members without FOXP2 mutation have normal speech and language skills. When the human FOXP2 was compared to FOXP2 in chimpanzies, gorilla and the rhesus monkey, (it was found that there two locations in which the protein coded by FOXP2 in these primates differ from the human version of the gene. Orang-utans and mice (showed differences in) three locations. In contrast, the gene showed essentially no variation at all when mapped across a population of unrelated people with normal language skills. ... (It is estimated that the human version of the unimpaired gene occurred) sometime in the last 200,000 years, that is, since the time of anatomically modern humans. The appearance of the human FOXP2 gene variant among earlier, ancestral hominids may therefore have caused improved language skills, with rapidly amplifying effects on group coordination, individual cognition, cultural complexity and population expansion".

If these surmises are correct, then, there may be a gene that determines the ability to develop Language, but it is common to all humans, and not specific for any selective set of them. In other words, the gene endowment in relation to Language is the common inheritance of all humans, and not limited to any geographic, cultural or ethnic group of them. But the gene is obviously not identified with any specific language or family of languages - it does not determine whether its "owner" will speak an Indo-Aryan or Tibeto-Burman language in preference to all others. The commonality of genetic inheritance cannot explain variation among languages of the world.

The "Origin" of Human Languages: The question whether human languages had a single or multiple origin is considered as insoluble. Speculations were sufficiently wild in the past. In 1866, the Linguistic Society of Paris forbade discussions of this topic. Human languages change so fast that differentiation among present extant languages is vast. Greenberg (1976) proposed that "universal roots" could be traced for certain items like body parts, numerals, etc., which "mutated" into the different expressions found for them in the various languages of the world (Cavalli-Sforza, Menozzi & Piazza 1996:96). Ruhlen 1987 prepared a map showing 17 linguistic "families" and traced the "genetic" linkages among them. Five languages, viz., Basque, Burushaski, Ket, Gilyak and Nahali were considered as "isolates". He proposed two "super-families", viz.,

- * Nostratic comprising Afro-Asiatic, Indo-European, Dravidian, Uralic-Yukaghir, Sino-Tibetan, Altaic, Eskimo-Aleut and Chukchi-Kamchatkan, with some authors also favouring the inclusion of Amerindian languages in this super family; and Eurasiatic, comprising Indo-European, Uralic-Yukaghir, Altaic, Korean-Japanese-Ainu, Chukchi-Kamchatkan and Eskimo-Aleut. The discrepancies are ascribed to differences in methodologies adopted respectively by Russian and American researchers. And
- * Austric, including Austro-Asiatic, Daic and Austronesian.

Please also see Gopinathan Nair, B.: Review of *Sumerian & Proto-Duraljan* by Assadian & Hakola, 2003, in *IJDL*.XXXIII.2:233-230, June 2004.

Lumsden & Wilson: 1981 propounded a theory that purported "to prove" a genetic predetermination of societal characteristics. They presented a set of elegant mathematical theorems that they termed "epigenetic rules", proposing a unit called "culturgens" as a common measure. Cavalli-Sforza and his associates (1994) found correlation among genes, geographic distribution of human populations, and language in many populations world-wide. They did not propose any causal significance to the correlation. Co-occurrence was found, but no causation could be established.

Pitchappan and his associates showed that Y-chromosome polymorphism correlated with the languages spoken among Piramalai

Kallar, Yadhava and Sourashtras near Madurai. They found some common genes in the Y-chromosomes of Sourashtras and some pre-historic populations in Middle East. In the case of the Yadhava, there was evidence of similarity with a more 'primitive' gene (i.e., somewhat mutated in its present manifestation), with Mid-east populations and the Yadhava, which the authors cite as evidence of different waves of historic migration from the Mid-east to South India. But there is no evidence to show that the gene specifically related to language identity.

The above is a summary of the evidence in favour of theories positing a link among genetic and cultural (including linguistic) variations found in geographically distributed polymorphic human populations. No specific gene determining the propensity of a human being to speak one or another of the thousands of languages in the world has been identified. The link is sought to be established by statistical correlations of certain features that are themselves distributed at random. Sample sizes on which these theories are built up are admittedly small. No claim has been made that the sample sizes had been determined in such a manner as to avoid purely random occurrences being generalized in the evidence.

Out of Africa for Languages too?: The currently accepted view of origins and spread of "*modern H.s.sapiens*" is that most of them derive from a "Mitochondrial Eve" whose daughters had daughters in every generation, as identified by the genes in the mitochondria, through all these generations and everywhere in the world. They migrated out of Africa through the millennia in different waves, and colonized the globe. Based on certain assumptions on the rate of mutation of the mitochondrial genes, a time scale has been worked out for such migrations.

It is argued that the same principle of a common "original" gene applies to languages too. All humans must have spoken just one language when the population was small enough to be comprised in a limited geographical area, presumably contiguous. This explains why languages can be accommodated in "genetic trees", analogous to human biological strains. Distance and "Mendellian Drift" would account for subsequent differentiation - but the analogy breaks down when we

consider that all human beings, irrespective of polymorphism, can biologically inter-breed, but the languages they speak will remain mutually non-intelligible.

Clustering and Commonality: Humans are gregarious and live in clustered communities. Correlation among cultural traits and languages can be explained by such community influences. Breeding patterns and societal compulsions about choice of mates within a community, or locality, explain common features of gene inheritance among related populations. Evidence is far from conclusive that cultural traits including languages are gene-determined. The analogy between biological gene-caused variability and the variability of languages should not be overworked.

Language as a Human Universal, and Languages as Variable Occurrences: I think that part of the confusion in the discourse is the failure to distinguish between Language as a human universal capability (or "competence"), which may be due to inheritance of several sets of genes that work in some sort of combination in order to produce that result, on the one hand, and the fact that several people sharing a habitat and a common set of inherited genes do speak a specific language in a specific area at a specific time, on the other.

Language Acquisition by Children has been the subject of vast studies. Chomsky had theorized that human children should have an inbuilt "Language acquisition device" in their brains, which takes "primary linguistic data" as inputs, and produces a grammar as an output. Its construction is accomplished in an astonishingly short time, to a large extent independently of intelligence, and in a comparable way by all children; i.e., it is a human, and not regional phenomenon specific to a morphological type like Caucasoid, etc. Most children, irrespective of genetic identification, locality of stay, and diversity of languages available, soon (by the time they are about two years old), pick up a system of communications that shares the diagnostics of Language, viz., a uniform code for the production and processing of symbols expressing a meaning or a message. The specific language that a child adopts is influenced by its immediate environs, and the language of those on whom the child primarily depends for his sustenance. It then proceeds to pick up the languages spoken by others in the locality, according to the extent of exposure to which it is subject.

We have all experienced the ability of children to master more than one language if the circumstances in which they are brought up are bilingual. Most of us learn English, though we have inherited hardly any "English" genes, if there are indeed such a thing. A Bengali child living with his parents in ISDL spoke and wrote Malayalam as easily as his mother tongue. His speech was indistinguishable from that of a Malayali child in the same circumstances. Malayali children who were his playmates, on the other hand, did not pick up any Bengali. All the children learnt English and Hindi.

Conclusion: The evidence, therefore, supports only the view that Language as an abstract competence is gene-determined, and common to all humans. The fact that an individual uses a specific language in preference to others is an accident of his environs. The sophistication of methods for differentiating among genes, and the persistence of certain specific locations for them such as mitochondria and y-chromosomes should not lead us to searches for genetic foundations of each and every human trait. The methods used, and the significance of the findings made, seem to apply more to the mixing up of human types as a result of migration and miscegenation. Language changes are incidental and behavioural.

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BIBLIOGRAPHY

Cavalli-Sforza, Menozzi & Piazza. 1996. *The History & Geography of Human Genes* (Abridged Paperback Edition). New Jersey: Princeton University Press.

Greenberg J.H. (Ed.). 1978. *Universals of Human Language* (4 Volumes). Stanford: Stanford University Press.

Lumsden C.J. & Wilson, E.O. 2005. *Genes, Mind & Culture - The Co-evolutionary Process*. New York & Chennai: World Scientific Publishing Co.

Payne J.R. 1985. Language Universals and Language Types in Collinge N.E. (Ed.), *An Encyclopaedia of Language*. London & New York: Routledge.

Pitchappan & associates. Madurai Kamaraj University: Various publications and conversations.

Sagart L., Blench R. & Sanchez-Mazas (Eds.). 2005. *The Peopling of East Asia - Putting together Archaeology, Linguistics and Genetics*. London & New York: Routledge Curzon.

A HANDBOOK OF KERALA (Vol. 1)

T. Madhava Menon (Ed.), 2000, HB, Demy 1/4, pp. xii+373,
Rs. 1,000/- (US\$ 125/-)

Among the I.S.D.L. series of *handbooks* of various States in India, the two-volume set on Kerala by T. Madhava Menon (IAS Retd.) has been published. The first volume covers the physiography, geography and physical features of the State, its forests, fauna and flora, history, religion and economy. The prehistorical foundations of Kerala have been detailed by Professor Rajendran. Because of the facilities available in the I.S.D.L., the section on history is based on a more intensive interpretation of Tamil sources. In the section on religion, folk belief-systems of the sociology of religious changes and the rituals of Hindu forms of worship have been described. The section contains articles on Buddhism, Jainism, Judaism, Christianity and Islam. There are articles on temple architecture, with illustrations. The section on economy contains contributions from some of the most eminent authors on this subject. The *Kerala Model*, out-migration, demographic transition and stagnation have also been analyzed.

PLURISEGMENTAL FEATURES AND INTONATION IN MALAYALAM

V.R. PRABODHACHANDRAN NAYAR

Thiruvananthapuram

Postural view in Phonetics associates most articulations with a clearly definable state or posture assumed by the vocal organs. Requirements of general classification of speech sounds will adequately be met by this technique. But if one's aim goes beyond classification, one has to pay attention to several other factors also. Awareness of the shutting, closure and release phases of plosive articulation, for example, will pave a clearer way than otherwise to understanding concepts such as affricate, unreleased plosive, nasal release, lateral release and aspiration. Similarly, a sharper insight into the processes involved in producing diphthongs and triphthongs also can be obtained only through an understanding of the dynamics of articulation.

See how the two Malayalam words given below are pronounced:

1 ¹/tittirikkil̥i/ 'a type of bird called *tittiri*'

1. Slashes // enclose reading transcription of language materials cited for exemplification; it is, strictly, neither phonetic nor phonemic, but helps to focus attention on a given utterance or a specific segment or part of it. The following non-IPA symbols have been used, as per common conventions in the field:

U Mid central vowel with spread lips approximating the short form of the vowel in **learn**
Long vowels are represented by doubling the symbol for short ones.

t Voiceless alveolar plosive as in **ant**

n Voiced alveolar nasal as in **tin** and **night**

c Voiceless palatal affricate

j Voiced palatal affricate

s Voiceless palatal fricative

r Voiced non-palatalized alveolar flapped

Y Voiced frictionless retroflex approximant with a central passage of the air over the curled tongue-tip.

2 /putukkunnu/ 'renew-present tense'

From the beginning till the end (1) is characterized by lip-spreading whereas (2) is characterized by lip-rounding. In postural phonetics features such as spreading or rounding of lips are held to be components of vowels only. But, obviously, they characterize the whole stretch of utterance including consonants also. This can easily be understood, by comparing the pronunciation of the first syllable in /kiṭṭi/ 'obtained' alternating it with that in /kuṭṭi/ 'child'. Lip-spreading and lip-rounding which are indispensable features, respectively, of /i/ and /u/ overlap the pronunciation of /k/ which precedes them.

Rhythm of Speech in Malayalam

Malayali's natural pronunciation of utterances like the following gives the impression of the presence of some rhythm characterizing each of them:

3 /kollam jillaa cerukiṭakarṣakavikasana eejensi/
'agency of small scale farmers in Kollam District'

4 /kuṇṇannammaa mattaayi/
'Kunjannamma Mathai' (A personal name)

The composition of verses conforming to different metrical patterns in the language is primarily based on the patterns of arranging syllables in each metrical foot, quantity of the syllables being either light or heavy.

Syllable quantity is a plurisegmental feature in the sense that it is dependent on the duration of the vowel functioning as the nucleus of the syllable in question as well as on the composition of the coda following the nucleus. Consider the pronunciation of the following four utterances in Malayalam:

5 /aṭa/ . 'a pan-cake like preparation'

6 /aaṭa/ 'garment'

7 /aṭṭa/ 'a centipede'

8 /aatṭa/ 'flour'

Phonetically the vowels in the first syllable in (5) and (7) are short in duration and those in (6) and (8) are long. Phonologically and as per the perception of the native speaker, the first syllable in (5) only is light, whereas that in (6), (7) and (8) are heavy. The heaviness of the first syllable in (6) and (8) correlates with the length of the vowel articulation in them. But in (7), although the vowel is short in duration, the syllable is perceived as heavy. This can be correlated with the complexity of the coda that follows the vowel.

Aspiration, Syllable Quantity and Retroflexion²

The first syllable in /nakham/ ‘nail’ is perceived as light whereas perceptively that in /nakram/ ‘alligator’ is heavy. It may be noted that /kh/ being a single consonant (voiceless aspirated velar plosive) functions as a simple coda only, before which the vowel that is phonetically short is phonologically interpreted as constituting a light syllable only. On the other hand, before the consonant cluster /kr/ functioning as a complex coda, the vowel that is phonetically short is interpreted as constituting the nucleus of a heavy syllable.

Syllable quantity is, in view of the above, a plurisegmental feature in Malayalam. It is a conditioning factor in the alternation of certain verb-stems, as can be seen from the examples shown below:

	<i>Past</i>	<i>Present</i>	<i>Future</i>	
9	/kaṇ-t̪u/	/kaan-unnu/	/kaan-um/	‘to see’
10	/non-tu/	/noov-unnu/	/noov-um/	‘to feel pain’
11	/ven-tu/	/veev-unnu/	/veev-um/	‘to get cooked’

In all the three cases, in the past forms the verb-stem syllable of the canonical form CVC, with a phonetically short vowel becomes phonologically heavy in quantity since the vowel is followed immediately by a consonant cluster. In the non-past forms the verb-stem with the canonical form CVVC has a vowel which is phonetically long and phonologically heavy.

Comparing forms in 9 with those in 10 and 11 one can note the relevance of another plurisegmental feature in Malayalam, namely

2. Prabodhachandran Nayar (1972) has discussed in more detail Aspiration, Syllable Quantity and Retroflexion, with special relevance to Malayalam.

retroflexion, in conditioning past-tense markers: In 9 the verb-stem and the past marker are both characterized by retroflexion, whereas in 10 and 11 they do not involve any retroflexion.

Plurisegmental Features vs Intonation

Features exemplified above involve processes associated with supra-glottal organs and cavities. This differentiates them from features of intonation which cannot systematically be correlated with supra-glottal processes of articulation.

Phonologically intonation in Malayalam is the combinatory effect of variation of pitch-levels and juncture, both of which are context-sensitive.

Emphasis vs Stress

As in all natural languages, any part of an utterance in Malayalam can be emphasized for the sake of focusing special attention. Such emphasizing involves more active involvement of muscles taking part in exhaling and articulation than in pronouncing other parts of the utterance. One of the auditory correlates of emphasis is loudness: the listener gets the impression that the utterance-part in question is pronounced more loudly than the other parts. Prominent articulatory correlates of emphasis are increased air-pressure, tenseness and longer duration.

The following four sentences, wherein the part that is emphasized is shown in italics, are intended to demonstrate the function of emphasis in Malayalam:

- 12 /raviindrankannaati aṭiccupoṭṭiccu/

Ravindran - glass - having hit - broke:

‘Ravindran broke the glass hitting it.’

- 13 /raviindranaaa kan^hnaati aṭiccupoṭṭiccatU/

Ravindran - is - glass - having hit - broke - it:

‘It is Ravindran who broke the glass hitting it.’

(It is Ravindran, and no one else, who did it.

Response to the question ‘Actually who broke the glass?’)

14 /raviindrankanṇaatiyaa aṭiccupoṭṭiccatU/

Ravindran - glass - is - having hit - broke - it:

‘It is the glass, which Ravindran broke by hitting.’

(It is the glass and nothing else, which Ravindran broke by hitting.

Response to the question ‘What did Ravindran break by hitting?’)

15 /raviindran kanṇaati aṭiccaa poṭṭiccatU/

Ravindran - glass - having hit - is - broke - it:

‘It is by hitting Ravindran broke the glass.’

(That is to say, he broke it, not throwing a stone at it. Response to the question ‘Actually, how did he break it?’)

The above examples demonstrate the correlation between emphasis and meaning.

This type of emphasis is, however, not to be confused with stress, which is an intrinsic structural feature of words in languages such as English. The first syllable in *hardly*, *father*, *any* and *steadily* is stressed; in *believe*, *about*, *before*, *attractive* and the like it is the second syllable, which is stressed. The pattern of stress is as indicated below in select words in English: *fourteen* and *half-hearted*: the stress falls on the first and second syllables; in *contradiction* it is on the first and third; the first and fourth syllables are stressed in *qualification*; and the second and fourth in *examination*. These stress-patterns are acquired by the native speakers and are to be learnt with meticulous care by the non-native speakers aiming at native-like pronunciation. Within the word, position of stressed syllables varies from language to language: In Hungarian, mostly the word-initial syllable is stressed; and in French and Swahili, the utterance final and the penultimate ones, respectively.

In Malayalam, however, there is no such rule governing the placement of stress. No lexicographer has felt it necessary to provide markers of stress while listing the lexical items in Malayalam so as to help users in pronouncing them properly. Speaking Malayalam with stress placed on different parts of sentences will be considered, in general, as artificial, affected, non-native pronunciation with some kind of so called ‘foreign accent’, characteristic of persons who did not have sufficient exposure to natural colloquial Malayalam.

The present writer has not come across in Malayalam any instance of contrast based solely on stress.³

All these facts stated above, point to the inevitable conclusion that at the phonological level there is no stress in Malayalam, which can, in all fairness, be considered a stress-less language, although, as in all natural languages, at the phonetic level, any part of the utterance can be emphasized in order to draw special attention to some specific aspect of its meaning. Stress is, therefore, not at all a significant component of the intonation in Malayalam, which can be considered as the combined effect of interplay of patterns of juncture and pitch.

Juncture

The articulatory and auditory correlate of Juncture is the nature of transition between the phones ending and beginning the successive words.

16 /aanappurattu kayari/

Elephant top - climbed:

‘(Some one) climbed on the top of (the) elephant.’

17 /aana purattu kayari/

Elephant top - on climbed:

‘(The) elephant stepped on (some one).’

The transition between /a/ which ends the word /aana/ and /p/ which begins /purattu/ in (16) and (17) are clearly different from each other: In (16) there is absolutely no room for even a potential pause in between the phones; the plosive articulation is extremely tense and, in duration its closure phase is much longer than that of /p/ in (16). On the contrary, in (17) the plosive is exceptionally lax and quite shorter; and

3. Comparing (i) /goopaalana ivite vannu / ‘Gopalan came here.’ with (ii) /goopaalana ivite varuu/ ‘Gopalan! Come here!’ the vocative form /goopaalan/ in (ii) might appear stressed on the final syllable in some specific instances of pronunciation. But it may be noted that the syllable in question even in such special cases will have a prominent rise in the level of pitch. Phonologically this rise in pitch by itself will suffice to serve as an adequate vocative marker. More over, the intra-textual context of /goopaalan/ in (i) and (ii) are different: The statement sentence (i) ends in the past finite form of the verb whereas the imperative sentence (ii) ends in the verb's imperative form.

there is perceivable pause in between the concerned phones. The juncture in (16) is plus / +/, whereas that in (17) is minus /-/.

Malayalam utterances (18) through (23) given below will bring out the crucial role of juncture in the language.

18 /paava + kkuṭṭikku koṭuttu/

doll - baby-for - gave:

'Gave to the baby-doll.'

19 /paava-kkuṭṭikku koṭuttu/

doll baby-for gave:

'Gave the doll to the baby.'

20 /ṣaṅkaraṇ + kuṭṭiyaanU/

Sankarankutty - is:

'(It) is Sankarankutty.'

21 /ṣaṅkaraṇ-kkuṭṭiyaanU/

Sankaran - child - is:

'Sankaran is (a) child.'

22 /iviṭa + nnu-pookarutU/

this place-from - going - should not:

'(You) should not leave this place.'

23 /iviṭe-ninnu + pookarutU/

this place - having stood - continuing - should not:

'(Your) standing here is prohibited.'

Pitch

Pitch is the auditory correlate of the frequency of vibration of the vocal folds: an increase in this frequency will be perceived by the listener as a rise in the pitch and a decrease as a fall. Pitch of natural speech undergoes continuous variation. Speech without any variation in pitch will be monotonous and perceived as lifeless. Control on pitch is an important part of the native speaker's competence. Although one does not notice the variation of pitch-levels in one's own speech and

dialect, most persons do take instant notice with great interest of the so called ‘tunes and rhythms’ manifest in other dialects. Thus, for instance, speakers of dialects of Trichur or Kannur stand out in Thiruvananthapuram primarily on account of the special ‘tunes’ in their speech.

Malayalam is not a tone language⁴; tone or pitch-level at the rank of word is not contrastive in any instance. Pitch in Malayalam is handled here in terms of four levels, namely low, mid, high and very high and three varieties of terminal, differentiated as rising, falling and non-rising & non-falling. They are, for the sake of convenience of recording and reference, marked above the reading transcription of the utterances in question, as follows, by numbers and signs:

Pitch levels

- 1 ---- low
- 2 ---- mid
- 3 ---- high
- 4 ---- extra-high

Terminals

- ↑ Rising
- ↓ Falling
- | Level (that is, non-rising & non-falling)

Different combinations of pitch-levels and terminals contribute significantly to the over all quality of speech in Malayalam. Punctuation marks such as full stop (.), question mark (?), exclamation mark (!), coma (,) and semi-colon (;) correlate, in general, with specific patterns of pitch-level cum terminal complexes.

Pattern I

This is characteristic of complete statements, as illustrated below:

<i>Pitch-level</i>	<i>Terminal</i>	<i>Punctuation</i>
Low	Falling	Full stop
3 2 1 ↓		
/maYa ma <u>ri</u> ./		
rain changed: ‘Rain subsided.’		

4. Pike, K.L. (1948).

/raajan pooyi./

‘Rajan went.’

/tirivoonam varaaraayi./

Thiruvonam coming-manner became:

‘Thiruvonam is imminent.’

/aval innale vannirunnu./

she yesterday having-come remained:

‘She had come yesterday.’

Pattern II

This is associated with incomplete statements.

<i>Pitch-level</i>	<i>Terminal</i>	<i>Punctuation</i>
Mid	Level	Semi-colon
2----- 1		3----- 2----- ↓
/aagrahiccu;.....	pakṣee	phaliccilla./
desired	but	did not bear fruit:
‘(Someone) desired (something); but it did not happen.’		
/goopan viliccirunnu;.....	avan	naale varum./
Gopan having called-remained	he	tomorrow come-will:
‘Gopan had called; he will come tomorrow.’		
/kaṇṭu; samsaariccu; iṣṭappettu; kaaryam urappiccu./		
Saw	spoke	liked
‘Saw; discussed (the matter); liked it and took decision.’		

Pattern III

This is generally the pattern of questions.

<i>Pitch level</i>	<i>Terminal</i>	<i>Punctuation</i>
High	Rising	Question mark
2-----3 ↑		2----1--- ↓
/ammayaano ? ⁵ -----	viliccatU./	
mother - is - question	called - that:	
‘Is it mother who called?’		

5. The question mark is placed just after the question word although in the writing system of Malayalam it is put sentence-finally.

----- 2 ↓ 3 ----- 2 ↓
 malayoorannalilum, laalityam nirañña naattinpurannalilum
 mountain valleys-in -and simplicity filled villages-in -um

3-----2-----1 ↓
 atu pracariccu./
 it spread:

‘It spread in ...centres ...metros...valleys...and in villages.’

Pattern V

This is associated with vocatives and emotionally charged expressions such as interjections.

<i>Pitch level</i>	<i>Terminal</i>	<i>Punctuation</i>
Extra-high	Rising	Exclamation mark

I. Vocative expressions

2 4 ↑
 /moon! / ‘Oh! Son!’
 /raajan! / ‘Oh! Rajan!’
 /iisvaraa! ‘Oh! God!’

2-----4 ↑
 /goopaalakriṣṇan! / ‘Oh! Gopalakrishnan!’

1-----2-----3-2 ↑ 2-----3-----4 ↑
 /hariharasutan ayyan ayyappasvaamiyee! saraṇamayyappa! /

II. Exclamations

2 4 ↑
 /ayyoo! / ‘Alas!’

2 4 ↑ 2 3 ↑ 2 4 ↑
 /allaa! aaraa itU! / ‘Hi! Who is this!’

Intonation Patterns of Phrases

Within groups or phrases the following types of pitch level variation are noticed:

(1) The constituent carrying emphasis will have relatively high level of pitch.

3-----2-----

Eg. /valiya aal/	'Great or big man'
/putiya saari/	'New sari'
/ceriya mootiram/	'Small ring'
/poṭṭakkulam/	'A pond in ruins'
/kalḷakkatha/	'False story'

- (2) In subordinate constructions of the structure qualifier + qualified, if the qualifier is not emphasized, the qualified constituent will be at a higher level of pitch.

2-----3-----

Eg. /aṭutta paripaṭi/	'next program'
-----------------------	----------------

2 ----- 3-----

/naale naṭakkaan pookunna baḥalam/	
tomorrow to happen going - which confusion	
'The confusion that may prevail tomorrow'	

- (3) In coordinating or conjoining constructions the same pattern of pitch levels is repeated for each constituent.

2 3 2 3 2

Eg. /maataapitaakkal/	'mother(s) and father(s)'
-----------------------	---------------------------

2-----3 2-----3

/sahoodariisahoodaranmaar/	'sister(s) and brother(s)'
----------------------------	----------------------------

1 2 1 2

/kaṭipiti/	'biting and holding'
/aṭitata/	'beating and shielding'

1---2--- 1---2---

/palarum palatum/	'different persons and things'
-------------------	--------------------------------

1 2 1 2

/atum itum/	'that and this'
/atoo itoo/	'that or this'
/naaloo añcoo/	'four or five'

BIBLIOGRAPHY

- Pike, K.L. 1948. *Tone Languages*. Ann Arbor: University of Michigan Press.
- Prabodhachandran Nayar, V.R. 1972. *Malayalam Verbal Forms*. Trivandrum.

Notes & Discussions

FROM ACOUSTICS TO COGNATE METHOD

B.B. RAJAPUROHIT

Mysore

Professor Vadaseri Iyemperumal Subramoniam might have gone out of our sight, but he always roams around us, particularly those of us who were close to him and whom he loved without reservation of any kind. I was fortunate to be one among his dear ones. My first acquaintance with him was in the year 1962, in Dharwar, in the Summer School of Linguistics, when he was invited by Prof. R.C. Hiremath who was the Director of the School, to give special lectures in the Summer School. I, as a research scholar working for Ph.D. under the guidance of Prof. Hiremath, was also working as the Secretary of the Summer School. I was also one of the students of that school and thus I had an opportunity of listening to his lecture. It is difficult to remember the topic on which he spoke but he was a welcome guest by the then eminent linguists who were the members of the teaching staff of the Summer School. They were A.M. Ghatage, M.A. Mehendale, A.R. Kelkar, P.B. Pandit, N.G. Kalelkar, Khubchandani, M. Shanmugam Pillai etc. V.I. Subramoniam was a Professor of Tamil in the University of Kerala (the then University of Travancore). It was rumoured that V.I.S. was a bold man, that he went and met the Officer-in-Charge of the Fellowship Award Committee of the Rockefeller Foundation, and put his case before him to go to USA for higher studies in linguistics. It was in the year 1955. The Officer-in-Charge was convinced about the credentials of VIS and awarded him the fellowship. Thus VIS got the fellowship and went to USA and did his research under Fred W. Householder Jr. Later, in the year 1958, Hiremath also got the fellowship for one year, and went to USA and worked out his *Structure*

of *Kannada*. I also had a strong desire to try to go to USA in the same scheme, but by the time I finished my M.A. in 1959, the scheme came to a close in the same year, to my bad luck.

However, I continued my research immediately after M.A., on *Descriptive Analysis of Vachana Literature* under the guidance of Hiremath and thus had an opportunity of attending the Summer Schools of Linguistics in Pune, 1960 and in Saugor (M.P.) 1961. Thus I had an opportunity of being the student of comparative and historical linguistics taught by Suniti Kumar Chatterjee, Sukumar Sen and S.M. Katre; dialectology and field methods taught by P.B. Pandit and U.N. Tiwari, and other subjects like phonetics and phonemics taught by the well known linguists like Kelkar and Ghatage of Deccan College, Pune, who are mentioned above. I also had a rare opportunity of being the student of acoustic phonetics, taught by Leigh Lisker in Pune Summer School in 1960.

Subramoniam became the Professor of Linguistics and the founder of the Department of Linguistics of University of Kerala, in 1965 and I joined the Department as a lecturer in 1967. He was speaking in a very low tone and articulating the syllables very fast. In the beginning, it was difficult for me to follow what he was saying. I got into the track slowly. On the whole he was speaking little and only the required words. The University did not have much space to accommodate the department. There were two classrooms, and two small rooms. Out of two rooms, one was occupied by the project scholars of Malayalam dialect survey, and in the other room I and G.K. Panikkar were sitting. Subramoniam did not have any room for himself and he was sitting in an armless chair, at the door-side of our room, with a table in front of him to write and a bookshelf with plenty of books. He was spending most of his time in reading books and writing. There was another chair to his left, to entertain the guests. We had to walk behind his chair to go out and come into the room. Although he spoke little it took no time for me to realise that he was a man of kind heart and profound sympathy. He was sitting in his above described "office" from 9 a.m. to 9 p.m. and this was indirectly prompting us to stay longer hours in the department although he never used to say that we should do like him. Since we stayed for longer hours we were forced to read a lot and write a lot. That gave us a lot of confidence in our teaching.

The department had a good library, with books on linguistics and related areas. But the series of dissertations of University Microfilms Inc. of Indiana were not available. Hence it was not possible for us to have a look at his doctoral dissertation.

Subramoniam's research work in Indiana University was on the topic, *A Descriptive Analysis of a Dialect of Tamil*. It is a descriptive linguistic analysis of a Tamil dialect spoken by the members of Vellala community, in and around Naanjinaad in Nagercoil, Kanyakumari district of Tamil Nadu. He being one of the speakers of that dialect, he could draw the required data for analysis from his own speech. He got his Ph.D. from Indiana University, for that thesis in 1957. The University Microfilms Inc., Indiana published it in the mimeographed version, in 1958. It is now made available in a book form by the International School of Dravidian Linguistics in 2003. Fred Householder, his guide, was better known as a lexicographer and a syntactician. But Subramoniam worked under his guidance a descriptive analysis.

The dissertation has the usual chapters like in any descriptive analysis: Introduction, Phonology, Morphophonology, Morphology of Nouns, Morphology of Verbs and Particles. If we look at the bibliography of the thesis, nearly 50% of the references are about phonetics and acoustic phonetics. This prompts us to feel that phonetics, and acoustics in particular, was his favourite subject.

The machine used by Subramoniam might be the one developed by the Bell Laboratory. If we look into the history of the spectrographs, it goes like this: The Bell Laboratory produced its first Sound Spectrograph in 1941 and that machine was quite popular in those days. It was used during World War II in attempting to identify enemy voices on telephones and radio. Later the technology was used by the New York City police. Potter, Kopp and Green wrote *Visible Speech* (1947, reprinted in 1966) and showed the way to use sound spectrograph and visualise the acoustic properties of speech. Among the linguists, Martin Joos used the same machine and wrote his book *Acoustic Phonetics* (1948). He discussed there, the harmonic analysis and basic acoustic theory, the basic vowel theory, indeterminacy and perception, consonants and minor vowel features, segmentation and decomposition of utterance. He was followed by the other prominent linguists. Roman

Jakobson, G. Fant and M. Halle who wrote *Preliminaries to speech analysis, the distinctive features and their correlates* (1952) using the spectrograph of Bell Labs.

Later another prominent company, Kay Electric Co. (re-named later as Kay Elemetrics Co.) was founded in 1947 and it produced its Sonograph, which was made commercially available in 1951. The Sonograph was recording the stretch of utterance of 2.4 seconds and was successfully giving all the acoustic information needed. There was practically no difference between the two machines. Fred Householder also must have had one of the two machines which Subramoniam must have used for his analysis.

Acoustic Analysis of Tamil Sounds

The chapter on Phonology in the dissertation *A Descriptive Analysis of a Dialect of Tamil* describes the vowel phonemes and the consonant phonemes and the distribution of their allophones. As usual the articulatory characteristics are specified. But the speciality of this description is that each vowel sound is given its acoustic property. That is, the vowels are given the frequency figures of formant 1 (F1) and formant 2 (F2). In case of some vowels, frequency figures of formant 3 (F3) are also mentioned. Although it is not mentioned in the thesis, it is now a well-established phenomenon that the frequency figures of F1 indicate the height of the tongue and they are inversely proportional to the height of the tongue. That is, higher the tongue height of vowel, lower would be the F1 and lower the tongue height higher would be the F1. The frequency figures of F2 indicate the forward-backward movement of the tongue and they are directly proportional to the forward-backward movement. That is, if the tongue is backward the F2 figures would be lower and as the tongue moves forward, F2 figures would grow higher. He might have got the go-about directions from his guide and accordingly the acoustic features are described.

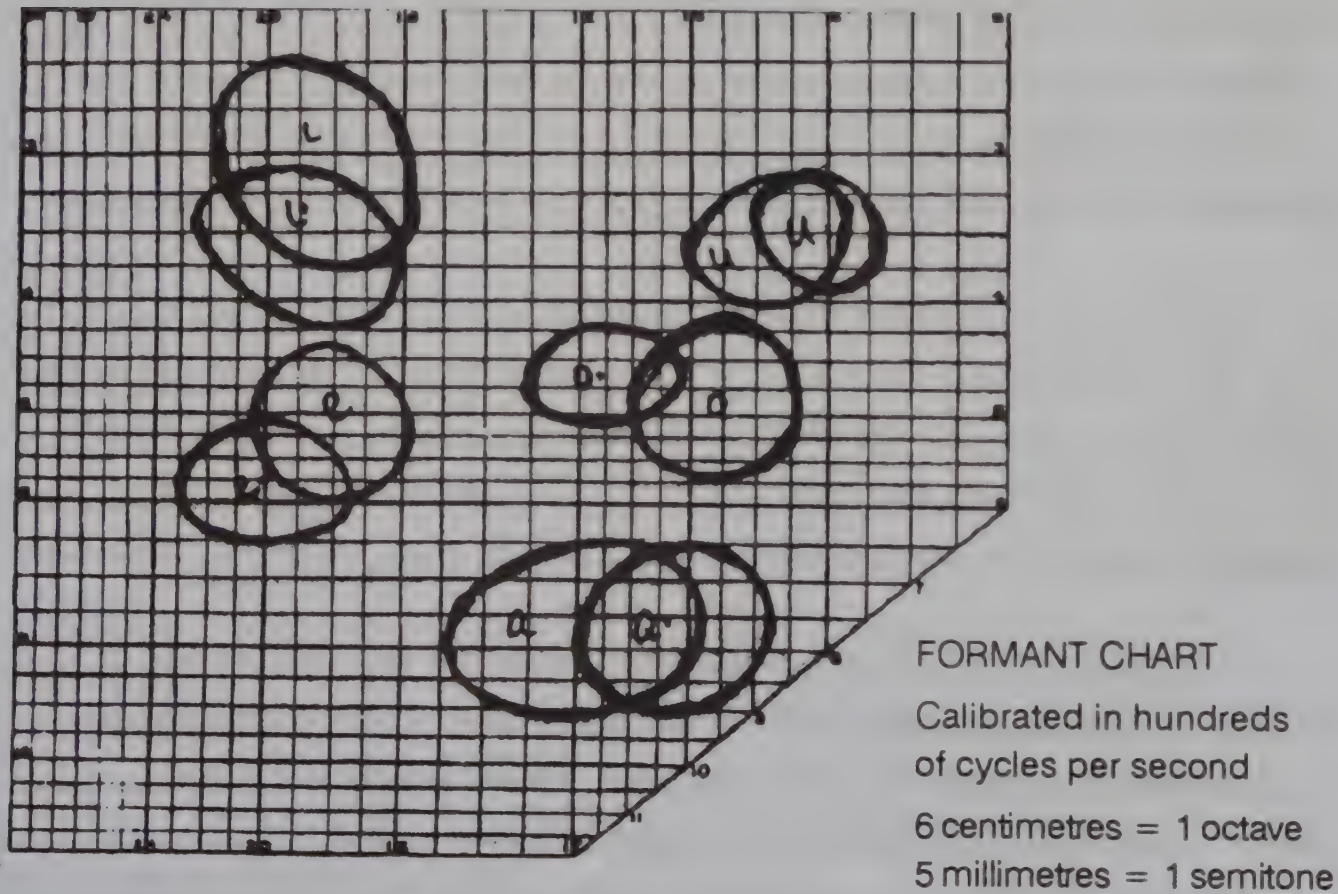
Vowels

Usually, in Indian languages, the F1 figures of the front vowels range from 200 to 400 cps, whereas the F2 figures range from 1800 to 2300 cps. The F1 figures of the central vowels range from 350 to 550 cps. Their F2 figures range from 1150 to 1400 cps. Similarly F1 figures

of the back vowels range from 300 to 500 cps and their F2 figures range from 825 to 1100 cps. When the vowels are plotted on a graph sheet, there would be some sort of overlapping. This we see in the acoustic description of any language. This indicates that the auditory impression prevails upon the acoustic picture.

In this context, in Subramoniam's description we find that the vowel [i] in some instances has very high tongue position with the F1 figures at 175 cps and the vowel \ddot{i} has the F2 figures in the range of 1800-2100. But he describes it as a lower high central unrounded vocoid. On the basis of the formant figures it needs a correction as lower high front unrounded vocoid because the other vowels in that area namely, [i] has the F1 at 175-400 cps and F2 at 1600-2000 cps and the vowel [i.] has the F1 at 375-450 cps and F2 at 1700-1900 cps. Thus it appears that \ddot{i} has fronter tongue position than even of [i]. Hence it would have been more appropriate to describe it as lower high front unrounded vocoid. The high mid central vowel u with F1 figures ranging from 350-450 and F2 figures ranging from 1500-2000 shows that it has the tongue position almost near \ddot{i} . This again confirms the fact that the articulatory and auditory impression prevails upon the acoustic information.

The tabulation of all the vowels on a graph is quoted below:



(Quoted from Appendix III A on page 81.)

Consonants

Interesting new information has been brought out in the description of consonants. Subramoniam uses the superscript ^c to indicate that the consonant is slightly aspirated although there are no aspirates in his dialect to call upon to use the superscript ^h to indicate the aspirated consonants.

There is a general impression that in Tamil, the voiceless and voiced consonants do not contrast in the initial and medial positions of words. But we find a number of instances here to illustrate the contrast. For example, for initial contrast, [t^co.sæ] 'a rice cake' and [do.sam] 'blemish'. They contrast in the medial position also. For example, [p^ca.p^cam] 'sweetmeat' and [p^ca.bam] 'sin'.

Another important phenomenon recorded here is that the F2 of the preceding and/or following vowel will have plus or minus transition. It is a well-known experience that the tongue position of the preceding and/or following vowel will change due to the articulatory requirement of the consonant. Subramoniam has rightly pointed out the plus or minus transition of F2 of the preceding or the following vowel. He means thereby that the tongue position of the vowel showing the transition, moves forward or backward in particular consonantal environment. But it is also likely that the tongue position moves higher or lower also in that environment. It would have been noticed if the plus or minus transition of F1 were studied. It is not possible to make any comment here about that because it has to be observed in the data.

For almost all consonants he posits long variety at the phonemic level. For example, /p./ and /p/ are separate phonemes, under each of which their allophones are described: /p./ has phonetic realisation as [p] and /p/ has phonetic realisations as [b, ɸ]. Similarly, /k./ and /k/ have phonetic realisations respectively as [k] and [g, x, ç].

A pioneering effort by Subramoniam in the distinctive feature analysis of Tamil is a worthwhile attempt. The methodology proposed by Roman Jakobson, G. Fant and M. Halle in their *Preliminaries to Speech Analysis* (1952) and Franklin Cooper, P.C. Delattre, A.M. Liberman etc. in their *Some Experiments on the Perception of Synthetic Speech* (1952) has been used here. The seven principles of distinctive

features are listed. Out of them, the principle number 5 about Retroflex vs. non-retroflex is interesting. 'Retroflexion is defined as minus transition for formant 3. Non-retroflex have plus transition for formant 2.' The F3 playing a crucial role in the retroflex consonants is a new phenomenon which needs to be explored further in Tamil and other languages.

However, the acoustic study of Tamil sounds, in the mid-fifties, that too when the instruments for the study were in the developing stage, can be said to be a pioneering work. It not only throws light on the fundamental phonology of Tamil, but it inspires other scholars also to undertake further acoustic study of other languages when a number of sophisticated equipment are available now including the software to be used in any computer.

After this first study, Subramoniam had a number of publications in different areas of linguistics including dialect geography and lexicography. But it may be of interest to the linguists to look into his mastermind project of Cognate Language Teaching.

Cognate Language Teaching Method

On the occasion of the 80th birthday of V.I. Subramoniam I published an article on 'The Cognate Language Teaching Method' in *Indian Linguistics* (Vol. 69, Nos. 1-4, 2008). Some information from that article may be relevant here also.

When I was working with Subramoniam in the Department of Linguistics of Kerala University, I had an idea about his way of thinking and his determination to realize what he believed was right. One of the important examples of such realizations in late 60's was the cognate language teaching method. The others in early 70's are DLA, ISDL and IJDL. He had a magnetic power of attracting his colleagues, who loved to work and share his innovative ideas. His kind heart drew many students near him. Although he spoke less, he was a constant source of inspiration and set an example by working hard himself.

Among many methods followed for language teaching, the cognate method is also one. It is conceived on the hypothesis that it should be easier and quicker to teach a language to the speakers of the cognate languages, because many vocabulary items are likely to be common and many grammatical and syntactic features are likely to be

similar. At the outset, this hypothesis seemed to be convincing. Thus a project of teaching Kannada, Telugu, Malayalam and Tamil to the cognate language speakers was launched in the department, under the supervision of Subramoniam. The project was embarked upon in 1967, to test the hypothesis and realise it, and the results came up encouragingly. The scholars from all the four major Dravidian languages were available in the Department and the project was taken up for experimentation. I for Kannada, N. Sivaramamurthy for Telugu, A.P. Andrews Kutty for Malayalam and V.I. Subramoniam himself and V. Veerasamy for Tamil, volunteered to undertake the project and work out the teaching material consisting of the lessons, lesson aids, notes on vocabulary and exercises. It was planned that the course should be completed within 24 days and thus 24 graded lessons were to be prepared. Since the target was to teach the popularly used language, like in the newspapers, the last two lessons should be an editorial writing and an actual news item from the newspapers. The earlier lessons were to prepare the learners to achieve this goal.

I was made the secretary for the project and was asked to keep a record of the day-to-day discussions and note the special points that may arise during the process. Subramoniam could not sit with us all through the process of preparation of the course material, due to his administrative responsibilities. But he was keeping himself close to the points that emerged in the discussions and was offering his suggestions and solutions. Thus the teaching materials for Kannada, Malayalam and Telugu were prepared. Tamil material was prepared, on the same lines, later.

The experiences narrated here apply to Kannada, Malayalam and Telugu material. The experiences are interesting and relevant as they throw light on the 'cognateship' of the three languages in question and open up new fields of research in the development of meaning in individual languages and comparative semantics of cognate languages.

We knew the definition of cognates in the technical sense that two words that have a common origin are cognates. For example, the English "kiosk" and the Spanish "quiosco" are cognates because they both come from the Turkish "kosk".

Since Kannada, Telugu and Malayalam are the cognate languages and have the same ancestral language, it should be possible

to develop teaching material to teach the language to the speakers of the other in the group. We also thought that since all the three languages have borrowed words from Sanskrit, it should be easy to find commonly understandable words, and those words could be the starting stuff of the lessons. But as we worked on we noticed that many words which were almost the same in the three languages, were having different connotations and could not be used freely to convey the intended sense. This was not a new phenomenon and is observed in many cognate languages of the world. The famous example that is quoted for this phenomenon is the English word "arena" which usually refers to a sports facility, and the Spanish *arena*, which usually means "sand". They both come from the Latin *harena*, which originally meant "sand" and came in time to also refer to an area of a Roman amphitheatre that was covered with sand.

Subramoniam suggested that the corpus for the construction of the lessons could be collected from the newspapers of a particular day in those three languages, because the national and international news are likely to be common in all the newspapers, and thus a stock of common vocabulary may emerge. Accordingly, the popular newspapers of 3rd November 1967 were word-indexed and the frequency of occurrence of words was also indicated. As expected, about fifteen percent of the vocabulary was found to be common in all the three languages. They were mostly the words from Sanskrit and a few from English. But the terminations were from that particular language. For example, *sahakarisu* 'to co-operate' in Kannada was *sahakariccu* in Malayalam and *sahakariñcu* in Telugu. We could use such words. There were other words which partially matched. For example, *kālu* 'leg' was available in Kannada and Malayalam but its Telugu equivalent *kāllu* was not available in the data. In such cases we had to import such words into Telugu data. Some words were common but their meanings were different. For example, *patragaḷu* meant 'letters' in Kannada, *patraṅgaḷ* meant 'newspapers' in Malayalam and *patrālu* meant 'documents' in Telugu, although *patra* originally meant 'leaf' in Sanskrit. There were plenty of such words which had different meanings in different languages although the words were cognates. We could not use such words although they were occurring frequently in all the three languages. Our experience was that the required words to compile a meaningful lesson were not available. In other words, it was possible to

use the data collected from the newspapers for general guidance only and it was practically impossible to construct the lessons strictly out of the collected data. Since the newspaper language was of the nature of third person reporting, the first and second person usages were not found. They were also to be imported. So we enlisted broad topics on which the lessons were to be prepared, keeping the national and regional interest in mind and also the cultural and literary environment. Thus we introduced conversation between the members of the family and the discussion between friends in order to cover the complete structure of the language.

I used to conceive the text of the lesson and launch sentence by sentence for word-to-word replacement in the other two languages. We were also trying to see that even the suffixes could also be replaced with the equivalent ones. But to our great surprise most of the times the sentences were not acceptable by replacement. We had to keep on trying different sentences till an acceptable sentence could be formed in all the three languages. For example, a sentence in the 3rd lesson:

rāamanu kāalējige hōogi prinsipālarannu kaṇḍanu.

‘Rama went to the college and saw the principal.’

in Kannada, was tried for form-to-form replacement. It was:

rāman kōḷējil pōyi prinsipaline kaṇḍu.

in Malayalam and

rāmarāvu kāalējiki pōyi prinsipālugarini kaliḥaḍu.

in Telugu.

Apart from the fact that Malayalam needed locative case suffix on *kōḷēj*, instead of dative as in Kannada and Telugu, form-to-form replacement was possible. But this exercise could not be maintained for a long time and we had to shift to the natural language.

It would have been an interesting data for the study of comparative syntax, if we had recorded all the deviant structures. Even though most of the times, the equivalent words were available for replacement, the final sentence would not be acceptable. In this effort, we had to compromise with the style of expression. In other words, in

the first few lessons certain amount of unnaturalness in the style of expression had to be permitted. After 10th lesson we had to give total freedom of expression to maintain the style and true colour of the language.

As soon as the text and notes were ready for all the lessons a trial course in Telugu was run on the speakers of Tamil on 28th May 1969 and the results were encouraging. It was decided to launch a full time course. The Fertilizers and Chemicals Travancore Ltd. (FACT) volunteered to depute ten of their sales officers to undergo training in Kannada as these officers were going to be posted in Karnataka to promote the sales of the company. Thus the first full-length course in Kannada was tried out in 1970 on the speakers of Malayalam.

There was a tight schedule from 8 a.m. to 9-30 p.m. on six days of the week. The introduction to linguistics and the linguistic terminology was necessary because the lesson aids and the notes on vocabulary were written using that terminology, although it was felt that some un-understandable thing was thrust upon the learners. Some intelligent participants could pick up the terminology and enjoyed the lessons. The lessons were introduced at the rate of one lesson a day. A lot of conscious effort on the part of the participants was expected as the lessons and the course was not an easy roll. This was highly in contradistinction with the direct method, a popular language teaching method. But for the quantity of stuff that was imparted, motivation was an essential requirement. In order to have a comparative idea, the learners were advised to compare the respective lesson in the Intensive Course in their mother tongue, and by comparing the structures in his mother tongue and the target language, the learning process could be made faster.

The first full-fledged intensive course in Kannada to the FACT was a success. I met two of the officers who participated in the course, after two years in Mysore. They were able to pick up quite a good amount of Kannada language through interaction with the customers. When asked about the effectiveness of the initial intensive course, they gave a strong positive reply.

I have not come across any full-length experiment similar to the one described above, in any part of the world. In that sense the Cognate Language Teaching Method as visualized and realized by V.I. Subramoniam is unique and still remains unsurpassed.

ENCYCLOPAEDIA OF DRAVIDIAN TRIBES (3 Volumes)

T. Madhava Menon (Ed.), HB, Demy 1/4, Rs. 2780/- (US\$ 300/-)

[Vol. I: 1996, pp. xx+405; Vol. II: 1996, pp. xii+393;

Vol. III: 1997, pp. xii+347]

Volume I: A thematic introduction arranged in a series of articles on physical anthropology, history, geography & environment, material culture, social organization, religion, life cycle rituals etc.

Volume II: Contains ethnographical reports on the tribal communities in Kerala, Karnataka, Tamil Nadu and some tribal communities of Andhra Pradesh. Articles on the languages spoken by some of these communities have also been featured.

Volume III: Contains articles on Dravidian tribes living in the cis-Vindhyan area and north of it. The major tribes described are the Brahui, Gonds, Abujh Maria, Bison Horn Maria, Muria, Maria, Kondh and Oraon.

A HANDBOOK OF WEST BENGAL (2 volumes)

Sanghamitra Saha (Ed.), HB, Demy 1/4, Rs. 1,750/- (US\$ 226/-)

[Vol. I: 1998, pp. x+459; Vol. II: 1999, pp. xi+433]

Volume I: This volume deals with the background of the study, land and population, history, religion, folk culture and social life of the people of West Bengal. It covers both western and eastern regions of Bengal. This thematically-arranged information-packed volume is well-documented.

Volume II: This volume has 10 chapters: Economy, Language and Literature, Educational System, Art, Media, Intellectual Achievements, Administration, Cultural Contact, Important Personalities and Places of Interest. Of them, some are fascinating, like the last one that brings before the readers a panoramic view of the different places and their natural environs. Similarly, the chapter on cultural contact covers the relation between Bengal and her neighbours, as well as the distant South, in a picturesque description.

Moderately priced, both volumes have many pictures. A comprehensive index covering the 2 volumes is given for ready reference.

Notes & Discussions

**ADAPTATION OF GITAGOVINDA IN
THE TEMPLE RITUALS OF KERALA**

N.P. UNNI
Thiruvananthapuram

It is often said that Jayadeva was the founder of the Bhakti movement which grew in strength and spread rapidly in the 15th and 16th centuries defying the aggressive sectarianism and intense bigotry of the preachers and followers of various religions and faith. It may be even said that this Bhakti movement opened a fresh field of melodic expression and it was Jayadeva who first preached the message of faithfulness, devotion and surrender of the will to the Lord through his immortal classic *Gītagovinda* and thus initiated a new but pleasant approach to God which forms the quintessence of *Gītagovinda* highly hailed as the "Indian Song of Songs" by Sir Edwin Arnold who has translated it into English. It is at once a great poem, a gripping lyric drama and a heart-entrancing Opera - all rolled into rapturous music.

There is some divergence of opinion as regards the identity of Jayadeva, the author of *Gītagovinda* though his nativity is fairly well established. It is widely held that he was born at Kendubilva (Kenduli) on the banks of the river Ajaya in Birbhum district of Bengal. The place is variously mentioned in different sources as - Tinduvilva, Vinduvila, Kenduli and Kendoli. The so-called Jayadeva temple of this place was built by the mother of Kirti Chandra, Maharaja of Vardhaman in Saka year 1605 or A.D. 1683.

Regarding his parentage, there are several views: .

1. The name of his father was Bhojadeva and that of his mother Ramadevi. Both died when he was very young. He married Padmāvatī,

whose hand was offered to him under a tree in Puri by her father, a man of deep devotional bent, under a direction from Lord Jagannatha given to him in a vision. Padmāvaṭī too was a woman of high religious temperament. The union proved to be a happy event and the wife was a great source of inspiration to the poet. Jayadeva proceeded to Vrindavan where he spent the early years of his life. Returning to Bengal, he stayed at the court of the king of Bengal. By the time, his wife had died under mysterious circumstances. Legend has it that once the wife of the king jokingly told Padmāvaṭī that her husband was dead. Padmāvaṭī could not bear the sad news and she fell down dead. When Jayadeva heard this, he felt sorry and left for his village where he spent the rest of his life.

2. According to another view, Jayadeva was the son of Narayana Sastriar, a very pious Brahmin. His mother was Kamalabai. Though he did not care for the life of a householder with wealth and children, his wife had a secret desire for a son, which she did not reveal to her husband. One night, Lord Jagannātha appeared before him in a dream and informed him of the desire of his wife. The husband felt that this change-over to a householder would be a hindrance to his penance and did not heed to the desire. Thus both husband and wife remained somewhat ashamed when a pious Brahmin came to their house to remind them and to surrender to the will of God. He felt that the Brahmin was none other than the Lord. A few months later, a male child was born to Kamalabai and that child was named Jayadeva. The boy grew religious and pious from childhood, learning all traditional scriptures. His father returned to the forest at a suitable age.

In the meanwhile, Deva Śarma, a pious Brahmin of Jagannath Puri prayed to the Lord and begot a daughter called Padmāvaṭī. As desired by the Lord, the Brahmin gave his daughter in marriage to Jayadeva. There are stories as to show she won over Jayadeva due to her noble actions. Thereupon, Jayadeva married Padmāvaṭī and they lived an ideal life as the devotees of Jagannath.

There are legends which mention the divine interference of the Lord in the composition of the lyric *Gītāgovinda*. One story indicates as to how the Lord himself composed a line to complete a stanza of the poem. In the stanza *Vadasi yadi Kiñcidapi*, he wrote *Smaragarala Khandanam* and stopped at that as he thought that the lotus feet of

Radha rested on the head of the Lord. He left at that and went to river Ganga to take his oil bath. During his absence, the Lord appeared in the guise of Jayadeva with oil dripping from his head, took the manuscript from Padmāvatī, wrote *Dehi padpallavamudāram* and disappeared. On returning from the river, Jayadeva sat down to complete the verse where he had left off but to his surprise it had been completed in exactly the same manner he wanted. He also noticed some drops of oil on the manuscript. On enquiring, Padmāvatī told him as to how he returned to the house to complete the verse and went back to continue his bath. He felt that his wife was more fortunate in having the vision of God though in his own form.

Another story indicates how the Lord felt enchanted by *Gītagovinda*. Once when a gardener's daughter was singing -

*Ratisukhasāre gatamabhisāre
 madanamanohara veṣam
 na kuru nitambini gamana vilambana-
 manjusara tam hrdayeśam
 dhīrasamūre yamunātīre
 vasati vane vanamālī
 gopīpīnapayodharamardana-
 cañcalakarayugaśālī*

and plucking vegetables in the garden, the sweet and enchanting melody of the lines made Lord Jagannātha (of Puri) leave the temple and follow the gardener's daughter into the garden. Once the song was completed, the Lord returned to the temple with his yellow garment all torn up by the thorns of the garden.

Since then, at the instruction of the Lord to the king of Puri in his dream, even today the song is sung in the night before the Lord returns to bed.

This celestial song in praise of Lord Krishna has 12 cantos and 24 *aṣṭapadis*. Each *aṣṭapadi* begins with a chorus followed by eight feet at the end of which the chorus is repeated. The melody and time of every song, i.e. *raga* and *tala* are mentioned at the outset. It is said that

the wife of Jayadeva, called Padmāvatī, danced with him according to the tunes.

There are many such stories all over India eulogising *Gītagovinda* and its author. The greatness of the poem and its divine character are also found eulogised in different parts of the land. With a view to prevent it from being dragged into the mire and misused by the common worldly-minded sensual beings, Jayadeva administers a warning at the beginning itself through the following lines:

*yadi harismaraṇe sarasam mano
yadi vilāsakalāsu kutūhalaṁ
madhuruakkomalakānta padāvalim
ṣṛuṇu tadā Jayadevasarasvatīm*

The third line of the above stanza is considered as a definition of the greatest and noblest form of literature all over India and it is on the lips of every literary man of Kerala.

Gītagovinda in Kerala

Jayadeva's influence on Keralite authors is immense. Bilvamangala, the devotee-poet from Kerala wrote *Bālagopālastuti* based on the RadhaKrishna which made him famous as the 'Jayadeva of the South'. He is also known as *Kṛṣṇalīlāsuka*. In Jagannatha temple, Devadāsīs are entrusted with the singing of the lyric during the night before the Lord retires for sleep as instructed by the King of the locality but in Kerala it is male singers who are enjoined to do it in morning rituals.

Gītagovinda is adapted in *Sopānasangīta* sung in the morning during the daily rituals of temples in Kerala. The singer, a member of the class of temple servants, stands near the flight of steps leading to the sanctum sanctorum for reciting the stanzas and this is also known as *Aṣṭapadi*. A percussion instrument beaten by a slender stick called *Idakka* is used by the artist as accompaniment to the music.

Sopānasangīta is popularly sung in the Vishnu temples of Kerala though it is also sung in temples with deities like Śiva.

Ītaykka or Edayka

This popular percussion instrument symbolizes *Vedas*, *Sastras* and *Kalas* (the art forms). It is modelled on the shape of *Katuntuti* (*dhakka*) held in the hand of Lord Nāṭarāja. It is a type of wooden drum made up of red sandalwood or the wood of jack-tree or *Kariṇṇāli*. The *tun* or pot belly of the drum has a length of eight *angulas* and diameter of four-and-a-half *angulas*. The central portion has a lesser diameter and the sides are hollow, of about three *angulas* in diameter. On the other side of the face of the drum, two small copper nails are fixed. The fibre of palm or string of *Veenā* (metallic cord) is tied fast in between. On either side of the drum, a small hole is made of a quarter of *angula* in diameter. Then fine leather of the inner lining of the stomach of goat is firmly fixed with gum on two separate rings made up of jack-wood which have two *angulas* more diameter than the diameter of the *tun*. Satin cloth is tied at the middle to give it an attractive look. Similarly, a long ribbon is tied to it to hold it suspended on the shoulder of the drummer. The drum stick with a length of eight *angulas* and diameter of a quarter *angula* is used to play the drum in a very gentle manner.

This instrument is a must for *Sopānasaṅgīta*, also called *Kottippādisseva*, in which drumming and singing go together.

Though the temples of Kerala are as old as the beginning of the Christian era, the introduction of *Sopānasaṅgīta* as a ritual is a later feature. It is sung in front of the *Sopāna*, the front string steps of the sanctum sanctorum. Karnatic classical music also had its influence on it though it keeps up a distinct style practised only in Kerala and certain specific *ragas* are used here.

Popularly only the following twenty *Gītas* from *Gītagovina* are adapted in *Aṣṭapadi* - the *Sopānasaṅgīta* in Kerala. *Gītis*, *ragas* and *talas* are indicated in the following table:

1. <i>Pralayapayodhijale</i>	<i>Saurāshtra</i>	<i>Adi</i>
2. <i>Sritakamalākuca</i>	<i>Bhairavi</i>	<i>Adi</i>
3. <i>Lalitalavaṅga</i>	<i>Mohanam</i>	<i>Adi</i>
4. <i>Chandanacarcita</i>	<i>Pantuvarāli</i>	<i>Adi</i>
5. <i>Saṅcaradadharasudhā</i>	<i>Sāveri</i>	<i>Adi</i>

6. <i>Nibhrtanikuñja grhe</i>	<i>Dhanāṣi</i>	<i>Adi</i>
7. <i>Nindati candanamindu</i>	<i>Śaṅkarābharanam</i>	<i>Adi</i>
8. <i>Sthanavihatamapi</i>	<i>Bilahari</i>	<i>Adi</i>
9. <i>Ratisukhasāre</i>	<i>Kedāragaula</i>	<i>Adi</i>
10. <i>Paśyati diśi diśi</i>	<i>Śaṅkarābharanam</i>	<i>Adi</i>
11. <i>Smarasamarocita</i>	<i>Sāveri</i>	<i>Adi</i>
12. <i>Samuditamadane</i>	<i>Ārabhi</i>	<i>Adi</i>
13. <i>Anilatarala</i>	<i>Punnāgavarali</i>	<i>Adi</i>
14. <i>Harirabhisarati</i>	<i>Madhayamavati</i>	<i>Adi</i>
15. <i>Vihita cātuvacana</i>	<i>Kāamboji</i>	<i>Adi</i>
16. <i>Mamiyachilita</i>	<i>Bhūpālam</i>	<i>Tripata</i>
17. <i>Vahati malayasamīre</i>	<i>Ānandabhairavi</i>	<i>Rupaka</i>
18. <i>Rajanijanita</i>	<i>Malahāri</i>	<i>Jhampa</i>
19. <i>Kathitasamayepi</i>	<i>Mukhāri</i>	<i>Jhampa</i>
20. <i>Vadasi yadi kiñcidapi</i>	<i>Mukhāri</i>	<i>Jhampa</i>

The following assessment by a historian of Sanskrit literature is noteworthy. "In the melody of diction, in the perfection of its composition, in the case of its alliteration and in the expression of varied emotions *Gītagovinda* has probably the first place in lyrical literature. Indian mind is mostly philosophical and so was presumably the mind of Jayadeva, full of devotion to the deity he addressed. The sexual ideas, apparent in the verses, have received at the hands of the commentators, an allegorical explanation of divine Philosophy as the longing and union of the supreme and the individual souls". Thus there are four aspects in which the poem may be viewed: 1. Literary, 2. Devotional, 3. Musical and 4. Mystical.

The *Sopānasaṅgīta* is not totally different from the so-called Karnatic music. It shows divergence only in the mode of recitation. In *Svarasthana*, *Swarasamvidhāna*, *Rāgamūrcchana*, *Sancaravishesha* and popular *Talas*, there are similarities. Sometimes a difference in names is noted. For instance, the *Chempata*, *Aṭantha*, *Champā* and *Pañchari* of the *Sopāna* are respectively called *Idi*, *Ata*, *Chāpa*, *Jhampā* and *Rūpaka* in Karnatic music. Some of these are met with in ancient treatises on music.

Gītagovinda in Kathakali

Kathakali, the famous art form popularly staged in the temples of Kerala, has adapted certain lines from the epic lyric of Jayadeva. In the introductory portion of the night-long performance called *Purappadu*, setting out of the story is sometimes represented by imitation. This introductory section is also called *Mañujutara*, indicating the Gī line adapted for imitation.

The popularity of this song, goverated by its magic spell, prompted two Malayalam poets in the 17th and 18th centuries to compose elaborate musical panegyric poems mainly based on the 10th *Skandha* of *Mahā Bhāgavata* and imitating the style of Jayadeva in dramatic design and descriptive quatrains. They are (i) *krishna Gīti* in 1654 by Manaveda Maharaja of Kozhikode - three times bigger than *Gītagovinda*, with its 304 quatrains, one *Daṇḍaka* and seventy *Gītas*, (ii) *Śivā-gīti* by Rāmapāṇi Vāda, where too the design and literary style of Geeta-Govinda is invariably followed. Though these two imitative works addressed to Lord Krishna and Lord Śiva respectively are intended for singing as invocation at the sanctum sanctorum, the most popular pleasant rendering continues to be that of *Gītagovinda*.

It was Kottayathu Kerala Varma (1650-1725), author and practitioner of Kathakali and innovator of a new style who decided to have the composition of *Gītagovinda* beginning with *Mañjutara - Kuñja Tala Keli Sadane* as invocational song to conclude the prelude of any Kathakali performance. The charming piece of song rendered in *Rāgamālika* is used in *Melapadam*.

BIBLIOGRAPHY

The Gītagovinda and its Imitations, by Banamali Rath, includes an appendix in which the name, the author and year of publication of 132 works are mentioned. *Sri. Jayadeva and Gītagovinda - A Study* by Gowrikuppuswami and M. Hariharan, Thiruvananthapuram: College Book House, 1980. Pp. 84-98.

Mahapatra, K.N. (Ibid. pp. 1-20) holds that Jayadeva belonged to Orissa on various grounds and provides a list of 15 works composed by

the poets of Orissa, related to *Gītagovinda*. Almost all the *ragas* in this poem were used by early Oriya poets.

Jayasankar, S. *Temples of Kerala*. Census of India - Kerala, 1997.

Unni, N.P. 2006. *Tantra Literature of Kerala*. Delhi: New Bharatiya Book Corporation.

Krishnamachariar, M. *A History of Classical Sanskrit Literature*. P. 341.

A GRAMMAR OF TULU (A DRAVIDIAN LANGUAGE)

S.L. Bhatt, 2005, Demy 1/8, pp. x+388, Rs. 200/- (US\$ 40/-)

An exhaustive study of the Tulu language submitted by Dr. Sooda Lekshminarayana Bhatt as a Ph.D. thesis to Wisconsin University, U.S.A., this book has an introduction, the locality of Tulu, its relationship with the other languages, phonology, morphology and syntax. One noteworthy feature of the book is the lexicon containing arrangement and pronunciation, grammatical categories, derivations, Tulu words and idioms, etc. This well-printed publication will be an asset to language students and Tulu scholars.

A LINGUIST VISITS BANGLADESH

Sanghamitra Saha, 2001, PB, Demy 1/8, pp. iv+96,
Rs. 75/- (US\$ 5/-)

A most interesting travelogue of a linguist whose parents came from Bangladesh and several relatives still live there. It reads like a detective novel.

Notes & Discussions

**ELT IN INDIA:
GLIMPSES OF THE PRESENT SCENARIO**

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Introduction

There is hardly a job advertisement these days without 'effective communicative skills in English' as a desirable, if not indispensable requirement. This, in fact, reflects the impact of rapidly changing employment requirements which in turn impact on our ELT situation. It is time for a major paradigm shift in the ELT practices in India in the context of the rapidly changing global scenario and such a shift has already begun to be under way, but there remains much more to be done. There has been a rapidly rising trend in the demand for English in our country, but whether our ELT practicing system is competent enough to meet such demand is doubtful. It is happy to note how David Graddol (2006) in his research on ELT, reviewing English in the world of the 21st century, its present and predictable future, refers to the reality of India's fast growing English-literate population, but he also refers to a report by the international consultancy McKinsey, in December 2005, which says, "although India produces 2.5 million university graduates each year, only a quarter are 'suitable' for employment by multinationals or their Indian outsourcing partners. Within five years, India may find itself short of 150,000 IT engineers and 350,000 BPO workers... The chief handicaps are weak spoken English skills, especially among graduates of non-elite schools and the uneven quality of college curricula and faculty." So the question is the 'employability' of our candidates.

At this point of time, with the rising demand for English as the preferred lingua franca for international communication and India enjoying a sizeable share of the global market for ELT, referred to as 'a multi-billion dollar project' (Nagarajan 2003), it would be worthwhile to take stock of the present ELT scenario in India. A look at the impact of the liberalization of Indian economy, consequent boom in job markets at home and abroad requiring communicative skills in English, resultant new trends in ELT practices in general and in higher education in particular, and also the challenges that emerge in the field will be in order. Such an overview would help us gain valuable insights for better ELT planning for future so as to enable our students evolve into global citizens and also allay parents' fear and anxiety about their poor performance in using English. The ability to use English with ease and confidence being crucial for success in today's highly competitive world, an educational system that churns out graduates proficient in their subjects of study alone, or even with a thorough mastery of the grammatical system of English, is highly inadequate. Against this backdrop, our educational system has to be revamped, if need be, so as to modify our ELT practices to meet the needs of the hour.

Genesis

The ancestry of English in India can obviously be traced back to the days of trade contacts with the British through the East India Company, leading later on to the British Raj. But even after the British left India, English continued to be used in our country in various domains of life and in variant forms in different regions. Over the years English struck deep roots in the Indian soil and procured a pride of place in the rich multi-linguistic tapestry of our culture. Though, of course, there naturally were early prejudices against English and English education and strong protests against its use in particular domains, in the long run such anti-sentiments disappeared and English could survive antagonistic attitudes and its growth and spread was on the path of progress. And now, with its rising importance in the global scenario, it is mostly looked upon as a valuable legacy left behind by the British, rather than a colonial vestige of the past. It has also withstood later attempts of regional governments to replace it with their respective regional languages. After all, it was the British imperial rule that we fought against and not their language, which was in fact, a powerful weapon even in our freedom fight.

However, the history of English or of ELT in India is not the focus of this paper and there is plenty of literature available on this. A detailed historical account of the growth of English in our country right from its inception is available in Howatt, A.P.R. (1984) and the scholarly work of Shreesh Chaudhary (2009) on contacts between foreign and native languages of India gives an engaging sociolinguistic perspective of the growth and spread of English in our country up to the present times.

The ELT Scenario

The ELT situation in India in the twenty first century is vibrant and dynamic, buzzing with 'activities', literally the English classrooms are no more silent but noisy with engaging language 'activities' aiming at developing students' oral communicative skills in English. The more you speak the better speakers you become. This shift of focus from the structural approach of teaching grammar rules through pattern practice drills to the communicative approach is the major development in ELT. This is to be attributed not so much to pedagogical reasons as to employers' persistent insistence on communicative skills in English as perhaps the most important requirement for employment.

Materials and Methods

Before this shift of focus to communicative ability, may be until less than a decade ago, academic syllabi for English for both school and college courses were mainly literature-based. For instance, B.A. / B.Sc. / B.Com. Degree courses of the University of Kerala, the core subject English called Part 1 English has papers in Prose, Poetry, Drama, and Shakespeare, while only part of a paper has grammar and composition as a component. Even in the syllabus for optional B.A. Degree Course in English Language and Literature, there is this marked imbalance in favour of literature to the neglect of language teaching. This discrimination prevailed even when the proficiency of students in the use of English for oral and written communication was in general deplorably low and even when the medium of instruction was mostly English.

This kind of literature orientation to the neglect of language skills, which are essential for language use, is evident in the school

curriculum as well. In Kerala, for the SSLC stream one can opt for either English or Malayalam (Mother tongue) as medium of instruction and for the latter English is a core subject from Standard one itself, a reform introduced last year. For the other streams CBSE, ICSE and ISC, English is the medium. For all these different streams on an average 5-7 hours per week are set apart for the teaching of English. Actually, the time allotted is not at all insufficient but unfortunately, no effective learning of language skills takes place and as a result even after 8-12 years of formal classroom learning, students fail to acquire effective communicative ability in English. There is a whole lot of reasons for this, including inadequate teaching material, the teacher oriented rote learning method of teaching and assessment and lack of ELT training for teachers, to mention but a few.

However, with the adoption of the Communicative Language Teaching (CLT) as the preferred approach, there are signs of positive changes, since CLT aims at developing the learners' communicative ability in English in formal and informal contexts of real life rather than linguistic competence in the language. As a result, major changes have been introduced in the curriculum for English at school level so as to discourage rote learning of stock answers to specific questions based on prescribed literary texts which actually tests one's memory rather than one's ability to use language. The changed curriculum, on the other hand, lays stress on developing the ability to use language in real life situations, for instance, how to use language for greeting a person, apologizing, congratulating, complaining, etc., and writing formal and informal letters for various purposes like applying for a job or leave, inviting your friend to your birthday party, etc. In short, the modified syllabi aim at developing the communicative skills of learners in English which are almost imperative these days for career success.

In higher education also several plans are being implemented with the same goal in view. For example, the syllabus for Part 1 English has been modified so as to include a sizeable component on communicative ability in English, such as aspects of pronunciation, functional use of English, etc. For instance, the Mahatma Gandhi University, in addition to introducing specially prepared instructional material for all undergraduate programs, has also started an oral test on speaking skills as part of the qualifying semester exam. They have also opened a Centre exclusively for English Language and Communicative

Skills. Similar measures have been adopted by colleges and universities throughout the country.

CLT brought in welcome innovations in teaching methods also. Actual practice in the use of language was provided, mainly through interesting activities, role-play, group work, discussion, debate, use of audio-visual aids, etc. intended to generate meaningful speech from students in simulated real life situations. The classes became learner-centered, where the learner is an active participant rather than a passive recipient and the teacher a non-interfering facilitator and mentor rather than a dominant dictator. Thus, drastic curriculum and syllabi modifications addressing the need for a different set of methods and materials from the traditional ones used for generations, doing away with the autocracy of the text and the teacher, wafted in a new refreshing ELT atmosphere better suited for the times.

Institutes of engineering and technology also have risen to the occasion, paying due attention to the need for honing the communicative skills of their students, architects of the nation and the world of tomorrow. A few years ago, authorities from the Technopark, Trivandrum, the hub of IT industry in the State, reported to the Vice Chancellor of the Kerala University about the 'unemployability' of many of the candidates on account of their inadequate communicative ability in English, a serious handicap. IITs and some other institutes already had an English component, but most of them didn't have any provision of ELT. Soon courses in Technical English / Communicative English were incorporated into the syllabi of engineering courses. Now most of them have a slot in their timetable for English and also an exam in it. These colleges also organize orientation programs with the same purpose, providing training in group discussion, interview skills, presentation skills, conversational skills, etc., so that they will not be misfits in the emergent brave new world of today.

Apart from these schools and colleges there are a number of private commercial coaching centres mushrooming in every nook and corner since 'Spoken English' / 'Communicative English' is one of the most lucrative businesses these days. They provide packages of crash courses to prepare candidates for job interviews and examinations. From my own experience as an examiner I must vouch that they do a commendable job in the field. There is fairly good improvement in the

performance of candidates thanks to these coaching centres, may be since in every business profit depends on productivity.

The University Grants Commission

Attempts as the ones mentioned on the part of institutes of higher education in promoting ELT have been generously supported in a big way by the unstinted support from the UGC. Today several colleges have Language Laboratories with the help of UGC funding. It has also been ready without unnecessary hassles or red-tapism to sanction new Degree courses in Communicative English and Functional English, recognizing them as job-oriented and socially relevant courses. Academic Staff Colleges of the UGC also pitched in with Refresher and Orientation programs for teachers in English.

Technology as an ELT Tool

With science and technology making incredibly rapid progress, with myriads of innovations and inventions day by day, ELT can make use of their resources to great advantage. Moreover, as our students today are extremely techno savvy, born and brought up in an era of technology, unless teachers change their conventional mind set and update themselves with new techniques, they will soon become anachronisms. The vast resources available for ELT are already in use sporadically, but their potential is yet to be tapped fully. The radio, tape recorder, OHP, television, Powerpoint presentations, video camera, mobile phone and above all the Internet which is a veritable gold mine of information, open up a rich treasure house of useful tools for the English language teacher. Websites with lessons specially prepared for ELT, mostly interactive, are available in plenty, for instance,

www.edufind.com/english/grammar

<http://webster.commnet.edu/grammar>

www.longman.com

www.dimdima.com (for young learners)

www.e-mesh.com (new trends in ELT)

www.latrobe.com (for teaching ESL)

to mention just a few from an ocean of such sites. Again, with the help of satellite transmission Edusat programs benefit learners from

different parts of our country, saving a lot of our time and energy. It is indeed nothing short of a veritable wonder world made possible by technology! But at the same time, technology has to be handled with extreme care and caution. It should not be a Frankenstein let loose, but a useful tool in the hands of a well-trained and resourceful teacher, to be wielded judiciously. For instance, there are sites and sites, with spurious as well as authentic information. Remember, it is just another tool for the teacher, but only a tool like the sand on the beach or a piece of chalk and a black board. It is the resourcefulness of the teacher that makes the difference. Technology does have a role but the pivotal role ultimately remains the teacher's.

Then there are organizations and institutions which have made valuable contributions to ELT in India. A couple of them are mentioned below as sample.

The British Council

The British Council with over 70 years of experience in ELT, has made considerable contribution towards the cause of ELT in India, through their English courses, teacher training programs, exams, online courses, and information resources. Being global leaders in ELT with well-trained teaching faculty and methods informed by research in language learning and teaching, their courses help develop the confidence and skills needed for effective communication in English. Moreover, their experience in India over the years enables them to meet the specific needs of Indian learners.

Its venture *Project English* which was launched in 2007 has the goal of reaching millions of teachers and learners of English in India and Sri Lanka, to provide quality ELT and training from primary learners to advanced corporate users and to improve the communication skills of young people. This Project has three strands: the first one aims to develop partnership with the policy makers and teachers and trainers so as to facilitate reform in ELT and to improve the levels of language learning and teaching. The second strand aims at Corporate Training, to address the challenges and issues facing industry by building capacity in English language competence and intercultural communication skills. The third strand, Direct Teaching provides training in English language, communication and inter-personal

skills to adult learners through the BC teaching centres in different cities.

BC's Hornby seminars are meant mainly for English teachers in the government sector and aim at teachers as well as teacher trainers and these Seminars, over the last 9 years, have helped directly train over 1500 teachers in India and Sri Lanka.

English Language Teachers Contacts Scheme (ELTeCS) helps teachers to discuss and share ideas on ELT and to keep them up to date with the latest theories and opportunities with other English teachers in India and worldwide. The English Teaching Professional (ETp) magazine helps teachers to connect with the English teaching community not only in India and Sri Lanka but also in the UK. It promotes the exchange of the best practices and teaching tips among English language teachers worldwide and it includes articles of direct relevance and interest to classroom teaching. One can also have access to classroom resources and material, articles on teacher development and tips and techniques useful for class room teaching. In short, their courses support teachers and trainers to develop their expertise and upgrade their ELT skills.

Then there are reputed Government institutions as well, which do yeomen service to the cause of ELT in our country. For instance, in the South EFLU in Hyderabad and RIE in Bangalore.

English and Foreign Language University in Hyderabad

EFLU, earlier called CIEFL, is a central university of higher education with three campuses, which provides for the study of English and foreign languages in the country. Along with a number of courses, in ELT it offers PG Diploma courses like the PG Certificate in the Teaching of English (PGCTE) and PG Diploma in the Teaching of English (PGDTE) which obviously are meant for teachers of English language. A large number of English teachers have benefited from these courses, especially through their distance education program. A number of publications in ELT are also to their credit, produced by eminent scholars in methodology and material production. Their courses and publications are of immense use to language learners as well as practitioners of ELT.

Regional Institute of English in Bangalore

RIE aims to make a qualitative improvement in English language teaching and learning through innovative techniques and need-based programs, addressing mainly the English educational needs of the four states in South India, whose governments fund the institution.

The wings co-ordinating ELT works are Training, Research, Publication, ESP (English for Specific Purposes) and Staff Development and Media wing. "English for All" is the motto on which courses are designed to help a cross section of the society, ranging from the common household to the corporate sector including foreign nationals and the courses are offered through mobile, stationary, or distance mode.

The Publication wing has to its credit a couple of books on various aspects of ELT which are of great practical use to teachers of English. For example, *English Classrooms* is a training manual aiming at improving the communicative abilities of teachers, providing an experience in new trends in language teaching. *Teacher Development Talk* is part of a training package for ELT, providing a lot of classroom activities. *English Sound and Spelling - A Source Book*, *English Sound and Spelling - Areas of Difficulty* and *Reading a Second Language - A Manual* are some of their publications.

Prospects of ELT in India

ELT obviously has bright prospects in India thanks to the great demand for communicative ability in English for entry into the job market at home as well as abroad. Moreover, India making rapid strides in various fields like IT, Space Research, Computer Science, etc., there is good demand for Indian professionals abroad and there is also a flow of foreigners into our country for various businesses.

India is also at the forefront of the rapidly evolving BPO market, another lucrative profession and attractive career option which requires good proficiency in the English language. Indian nurses are also in great demand abroad and clearing the International English Language Testing System (IELTS) is mandatory for them as well as for job

seekers in many other fields for working in many countries abroad. More and more candidates are taking this exam, as indicated by the press release of 21 April 2009, which says "the IELTS celebrated its twentieth anniversary in 2009, marking its unprecedented international growth and success in setting the standard of English language proficiency for Higher Education and migration. It has developed into a global leader, accepted by over 6,000 organizations worldwide. In India in 2008 alone, over 200,000 people took IELTS." Speaking of IELTS' phenomenal growth, Kevin McLaven, First Secretary (Educational Services) British Council India observes, "Over the last two decades IELTS has become the leading and most widely accepted international English language test in the world. Whether for work or study, millions of ambitious candidates have benefited from the life-changing opportunities that IELTS enables..." (ibid) and the natural corollary of this growth in the number of takers of this exam is greater scope for ELT in India.

Now that the lull in businesses for the past two years due to the global economic recession is slowly subsiding, there are clear indications of a remarkable spurt of development and come back of opportunities in all sectors. As Som Mittal, President of Nasscom has remarked, "The next decade would be one of big opportunities... the IT sector... tipped to grow four times in scale over the next decade." (*The Hindu*, 1 May 2010). Again, there is a report in *The Hindu* of 2 May 2010 with the title 'Comeback Time for Campus Recruitment' giving statistics of the great leap in the number of job offers for the 2010 batch of College of Engineering, Trivandrum. There is a clear reversal in the trend of dwindling job offers via campus placements during the recession-hit 2009. A similar upward trend is likely in other sectors as well, such as ITES and BPO, paving the way for still brighter prospects for ELT in India.

Challenges for ELT

It is true that there is good demand for English and hence for ELT too, but does the ELT situation here match in terms of supply to meet the demand? There are definitely problems besetting our path to progress to achieve our target of meeting spiralling demands, which need to be addressed urgently. All is not well with the ELT provision in our educational system, as is evidenced by the inadequacy of our

graduates for employment. Majority of students after their 12 years of formal classroom learning, or often even after graduation, generally come out with very low levels of English language proficiency. They are not able to use the language in various contexts of real life, both formal and informal. Of course, a minority from the elite section, hailing mostly from metros like Mumbai, Delhi or Chennai do attain quite a high level of proficiency, capable of handling English effectively with fluency and ease. But they are the exception rather than the rule. As already pointed out, methods and materials of teaching, lack of proper training for teachers, lack of exposure to the use of language etc. are some of the serious stumbling blocks. In fact, it is just the tip of an iceberg since the whole educational system needs revamping. However, some remedial measures are already under way with regard to these handicaps, though we still have a long way to go.

Inadequate and often total lack of proper ELT training of English language teachers is a major problem. Till recent years, teachers who were graduates in any subject could teach English, the justification being English as a core subject for all Degree courses. Further, there is often a mismatch between the traditional mindset of many language teachers and the present need for a communicative approach to language teaching. The kind of skills acquired during their formal study are inadequate to meet the needs of today. Moreover, teachers' perceptions and attitudes towards this new form of teaching and learning, in fact, a set of ingrained belief systems seem to influence teacher-behaviour adversely. To make the situation worse, many teachers lack any commitment to their profession and consequently are often lethargic and indifferent, while the communicative approach to be successful needs the teacher to be alert, committed and resourceful.

Yet another challenge is posed by the large numbers of marginalized learners from disadvantaged backgrounds, hailing mostly from rural areas. Even after 400 years of ELT in India, it is doubtful whether the refreshing breeze of reforms and modifications has ever wafted into their lives. Most of the innovative measures are beyond their access. Almost all these students have a poor command over English. Fortunately, some initiatives are already there, like Teaching of English to the Disadvantaged (TED). The TED programs launched are specially designed for these disadvantaged learners.

Again, overcrowded classrooms, unusually high expectations of parents and low motivations of students and teachers still characterize most classrooms in India, especially of Government schools whose growth is often stifled by lack of funds, facilities, and faculty, with the most non-ideal situation for the teaching of a non-native language like English.

Suggested Recommendations

It is a myth or misconception to think that teaching at higher levels, colleges and universities, does not call for any special training. Actually, since teaching is a skill, it does require appropriate training, especially so with second language teaching. Therefore, for teachers of English, right from pre primary classes training in ELT should be mandatory. Since teachers' English is the major if not the only exposure to English use for many students, it is most important that teachers should be their role models in the use of English too and hence the importance of teacher selection and training. The teachers' communicative ability in English is as important as, if not more important than their academic qualifications and experience. Actually in smaller classes it is all the more important since language learning is quicker and easier at younger ages. L2 learning is in many respects similar to L1 acquisition (Syamala 1993). Children just 'pick up' language from the environment. If this can happen in the smaller classes, huge efforts at language teaching can be done away with later on in higher classes. Therefore, creating an environment where children get good exposure to English in use is the ideal and conducive condition for second language learning, but of course, it is easier said than done, because of several constraints in our set up.

Equally important is regular feedback and timely follow up of training programs for teachers, both pre service and in service conducted by various bodies like Teacher Training Colleges and Academic Staff Colleges.

Material production also has to be taken care of so that it helps learners attain their target or achieve the objectives spelt out in the curriculum. The attempts on the part of NCERT and Boards of Studies of universities spell signs of changes for the better.

With regard to methodology of ELT, instead of strictly adhering to any one methodology, an eclectic one tailored to suit the specific needs of the learner group will be more effective. Just because we make use of technological devices does not mean that we should totally do away with traditional methodologies like Grammar-Translation, Audio-Lingualism or Task-Based Learning.

Since resourcefulness of the teacher is the most decisive factor for ELT to be successful and effective, selection of faculty right from the lowest class is important. If the teacher is resourceful and properly trained, over-dependence on ready-to-use materials and methods will become redundant. The textbook should not be an indispensable crutch for an English language teacher to engage a class. Stop swearing by methodologies and materials and start focusing on your particular learner group and customize the various aids, including technology, for their benefit.

Technology should be tapped to the maximum extent possible, but use it with caution and discretion and do not be carried away by its inventions. At the end of the day, the most important stakeholders are our students who should be enabled to attain the ability to use English with confidence in this highly competitive world and to that end technology should be used as a tool.

Finally, in order to identify the problems and challenges ahead of ELT so as to devise remedial measures, research in socially and pedagogically relevant areas of ELT should be encouraged. Already, some research has been done and there is some ongoing, however insufficient that may be, but unfortunately the findings and insights of research often fail to be translated into remedial measures. First of all, research should focus on practical rather than theoretical issues and equally important is to expedite plans of remedial measures based on the findings and insights.

Conclusion

No doubt, the ELT scenario in India is bright and promising in the context of the rising importance of English in the global scenario. At the same time, it is doubtful whether we succeed in tapping its present potential to the fullest. Another point to be reckoned with is the

stark and disturbing reality that even after more than fifty years of independence and many five-year plans, under-achievement in English still persists among the disadvantaged and marginalized sections of society. They too must be enabled to exploit opportunities through literacy in English.

To realize this dream we have miles and miles to go before we sleep.

BIBLIOGRAPHY

Howatt, A.P.R. 1984. *A History of English Language Teaching*. Oxford: Oxford University Press.

Graddol, D. 2006. *English Next*. London: British Council.

Nagarajan, M. 2003. The Politics of ELT - Perspectives for the 21st Century. *The Journal of English Language Teaching (India)*, Vol. 39/5. Pp. 11-17.

Shreesh Chaudhary. 2009. *Foreigners and Foreign Languages in India: A Sociolinguistic History*. New Delhi: Cambridge University Press. India Pvt. Ltd.

Syamala, V. 1993. *Language Acquisition: Theory and Practice*. Trivandrum: Dravidian Linguistics Association.

The Hindu. Saturday, 1 May 2010.

The Hindu. Sunday, 2 May 2010.

<http://www.britishcouncil.org/india-connecting-project-english.htm>

www.ielts.org

<http://riesi.kar.nic.in/intro.htm>

www.elc.emacmillan.com

<http://www.languageinindia.com/nov2005/index.html>

Press Release. 21 April 2009.

www.efluniversity.ac.in

BIBLIOGRAPHY OF PROF. V.I. SUBRAMONIAM

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Prof. V.I. Subramoniam's academic contributions in the form of publications began in 1953 when he took charge as Hon. Professor of Tamil in the Travancore University and it continued for more than half a century till his demise on 29th June 2009. He has adorned several academic, administrative and organizational positions during this period and made his own imprint in all of them.

This bibliography is compiled after his demise. However, it cannot be considered as complete despite the best effort of the compiler in obtaining bibliographical details on certain unpublished papers, speeches made at conferences etc. Prof. Subramoniam had published books, articles, notes, comments and reviews in Tamil, Malayalam and English. Besides, he wrote erudite and lengthy introductions, foreword/preface to several books of other scholars. His articles, notes, reviews, comments and writings on miscellaneous topics are found scattered in several journals, books, encyclopaedias, periodicals and newsletters. His unpublished works include presidential addresses in National and International conferences, seminars, certain Project reports etc., the complete details of which are not available at present and hence they could not be included in this bibliography. As and when they are obtained, they can be incorporated as an addendum to the main list.

A. Chronological List (1953 to 2009)

1953

1. *Kaappiyakkatturaikal* (Tamil), Meerania Publishing House, Tirunelveli.

2. "The Evolution of the Tamil Script", *Tamil Culture*, Madras, Vol. II (1), pp. 36-41.

1954

3. "Marathi Loans in Tamil" (with P.C. Ganeshsundaram), *Indian Linguistics*, Pune, Vol. XIV, pp. 104-122.
4. "The Importance of Tamil Epigraphy", *Tamil Culture*, Madras, Vol. III, pp. 130-138.

1955

5. "A Study of Personal Names in Cankam Literature", *Indian Linguistics*, Vol. XVI, Chatterji Commemoration Volume, Linguistic Society of India, pp. 170-178.
6. "Muslim Literature in Tamil", *Urdu Encyclopaedia*, Government of Pakistan, Republished in *Tamil Culture*, Madras, Vol. IV (1), pp. 73-89.

1956

7. "Critical Evaluation of Daniel Jones Observation in Tamil Phonology", Paper read in the annual meeting of the Linguistic Society of America, Pennsylvania on 28.12.1956.
8. "Morpheme and Phrase Boundaries in Tamil", Linguistic Club, Michigan, USA, 28.7.1956.

1957

9. "Harris' Technique for Phonology", Paper read in the Indiana Linguistic Club on 20.1.1957.

1958

10. "A Descriptive Analysis of a Dialect of Tamil", Ph.D. Dissertation, Indiana University, Bloomington, cf. L.C. Card No. Mic. 58-2940, *Dissertation Abstracts*, USA.
11. "Amerikka Nattu Moliyal Patippu" (Tamil), *Kalaikkatir*, Coimbatore, pp. 19-28.

12. "Bhasha Sastram" (Malayalam), *Mathrubhumi*, Calicut, June 29.
13. "Classification of PurananuuRu Verb Stems", Mimeographed part of the *Grammar of PurananuuRu*.
14. *Linguistic Theory and Grammatical Tradition*, Kerala Linguistic Society, Read on 30.7.1958, Sanskrit College, Trivandrum.
15. "Need for Linguistics", *Tamil Culture*, Madras, Vol. VIII (1), pp. 73-89.
16. "Phonemics", Mimeographed part of the "Grammar of PurananuuRu.
18. "Vinaittirupu Vilakkam" by M. Raghava Iyengar, Reviewed in *The Hindu*, 30th November.

1959

19. "Etirma Rai" (Tamil), *Ganesar Centamil Kalluuri Jubilee Volume*.
20. "Negatives", *Tamil Culture*, Madras, Vol. VIII No. 1, January-March, pp. 32-43.
21. "Porulatikaaram" by M. Raghava Iyengar, Reviewed in *The Hindu*.
22. "PuRanaaanuuRu" edited by Murray Rajam & Co., Reviewed in *Eluttu*, Madras, October, pp. 309-310.

1960

23. "Aṇuvijñāaniiyam", Ed. By Viswanatha Iyer. Reviewed in *The Hindu*.
24. "Kuruppuvinai" (Tamil), *Centamil*, Madurai, April, pp. 20-30.
25. "Moliyiyal" by R. Srinivasan. Reviewed in *The Hindu*.
26. "On Textual Criticism", Introduction to Mr. M. Ramakrishnan's work on *Research in Textual variations* (Tamil), Theni, pp. 6-15.

1961

27. "Ceytu ennum Vinai Murru" (Tamil), *TPM Sixtieth Birthday Commemoration Volume*, Coimbatore, pp. 315-321.
28. *Cila Katturaikal* (Tamil), Meenakshi Puttaka Nilayam, Madurai.

29. "Dravidian Comparative Vocabulary" by R.P.S. et al, Reviewed in *The Hindu*.
30. "Dravidian Words in Sanskrit", *Tamil Culture*, Madras, Vol. IX No. 3, July-September, pp. 291-300.
31. "Muslim contribution to Tamil Literature" by M.M. Uwise. Reviewed in *Tamil Culture*, Madras, Vol. IX No. I, January-March, pp. 98-99.
32. "Phonemic Outline of a dialect of Malayalam", Mimeographed, Accepted for publication in *Archive Orientalni*, Czechoslovakia, 1959. Published in *Indian Linguistics*, Vol. 23, pp. 99-116.
33. "Transformational Analysis of a lyric in PuRananuRu", *Dr. R.P. Sethu Pillai Silver Jubilee Commemoration Volume*, University of Madras, pp. 155-162.

1962

34. "A Transformational approach to Tamil syntax", Paper presented at Autumn Seminar of Linguistics, Baroda.
35. "Cankakaalac CiRappuppeyarkaḷ" by M. Dorairangasamy, Reviewed in *The Hindu*, January 21.
36. "Pantaittamil oḷiyai-eppaṭi Uukippatu" (Tamil), *Kalaikkatir*, Coimbatore, pp. 96-100.
37. "Phonemic Outline of a dialect of Malayalam", *Indian Linguistics*, Poona, Vol. 23, pp. 99-116.
38. *Index of PuRanaanuuRu*, Department of Tamil, Kerala University, pp. XII + 628.
39. "ORRumaippaṭutal" (Tamil), *1008th volume. Commemorative Volume* published by Saiva Siddhanta Publishing Society Ltd., Madras, p. 136.
40. "Outline of Tamil Transformations", Mimeographed part of the *Grammar of PuRanaanuuRu*, Discussed at the Annual Meeting of the Linguistic Society of India at Dharwad and at the Seminar at Baroda.
41. "Reconstruction", Mimeographed part of the *PuRanaanuuRu Grammar*.

42. "Transformations in Tamil", Reprints of papers for the Ninth International Congress of Linguists, Massachusetts, p. 102.
43. "Muslim Literature in Tamil", *Urdu Encyclopaedia*, Government of Pakistan, Republished in *Tamil Culture*, Madras, Vol. IV No. 1, pp. 73-89.
- Tamil version published in 'Mulakkam', a bimonthly from Madras on 5.1.1962, p. 5, 20.1.1962, p. 9 and 5.2.1962, p. 7.

1963

44. "Allum Illum" (Tamil), *V.V. Ramaswamy Commemoration Volume*, Virudhunagar, pp. 96-98.
45. "Malayalam Verb Classification", *Sanskrit Journal*, University of Kerala, Trivandrum, pp. 85-98.
46. "Pantait Tamilar mana vakai" (Tamil), *KuRinñci*, Madurai, 15-1-1964, pp. 58-60.
47. "Rethinking in Morphology", Paper read in the Summer Meeting of the Linguistic Society of India, Hyderabad. (cf. 58)
48. *Tolkappiyam Uraikkovai*, Vol. I (Edited with A. Arulappan), Arul Accakam, Palayamkottai, pp. XVI + 5 + 586 + 10.

1964

49. "Malayalam Phonological Rules", To appear in the Collected papers of the Autumn Seminar, Kurukshetra University, Punjab.
50. "Quick Grammar", To appear in the Collected papers of the Autumn Seminar, Kurukshetra University, Punjab.
51. "Towards Generating Morpheme from Phonemes", Paper read in the 26th International Congress of Orientalists, New Delhi.
52. "Tolkappiyam", *VanchiNadu* Vol. 5, Nos. 39-40, dt. 15-8-64, pp. 4 & 17.

1965

53. "Bharatiyin Paattir kaanum Palañ Corkal" (Tamil), *Vanchinaadu Onam Issue*, Trivandrum.

54. Chairman's speech for the section 'Comparative Grammar' and 'Dialectology' in the Seminar on Grammatical Theories in Malayalam, sponsored by the Universities of Kerala and Annamalai.
55. "Phonology as gleaned from Liilathilakam", Paper read in the Seminar on Grammatical Theories in Malayalam, sponsored by the Universities of Kerala and Annamalai.
56. "Proto-Dravidian Dental, Palatal and Nasal Phonemes", *All India Oriental Conference*, XXVII session, Gauhati.
57. "Reconstruction of the Proto Dravidian Nasal", Paper read in the 25th All India Oriental Conference, 1965. To appear in the *V.V. Research Institute Bulletin*, Hoshiarpur, Punjab.
58. "Rethinking in Morphology", *Indian Linguistics*, Vol. 26, pp. 172-174. (cf. 47)

1966

59. "Ceenaavaraiyarum Tarkka Sasttiramum" (Tamil), *KuRinci Pongal Malar*, Madurai.
60. *Ilakkiyakolkai*, by Welleck and Warren, Translated by Gloria Sundaramathy and supervised by V.I. Subramoniam, Paari Nilayam, Madras. Published under the auspices of the First International Conference of Tamil Research held at Kuala Lumpur, Malaysia, April.
61. "Tamil Studies in other Indian Languages", I.A.T.R., Kuala Lumpur, Malaysia in connection with the first conference in April.

Also appeared as "Tamil Studies Beyond Tamil Nadu" in *Tamil Studies Abroad - A Symposium*, (Ed.) Xavier S. ThaniNayagam, I.A.T.R., 1968, pp. 119-128.

62. "The Influence of Tamil on Mahabharata", *Proceedings of the First International Conference Seminar of Tamil Studies - II*, I.A.T.R., pp. 132-137. .

1967

63. "Speech and Hearing", *Proceedings of the National Seminar on Rehabilitation Services and Research*, Vol. II, Vocational Rehabilitation,

Department of Health, Education and Welfare, USA, Medical College, Trivandrum, pp. 182-190.

1968

64. "A Problem in the Reconstruction of the Proto-Dravidian nasal Phonemes" in *Pradidaanam - Indo-Iranian and Indo-European Studies*, Presented to F.B.J. Kuiper on his 60th Birthday, Hague.
65. "Landmarks in the history of Tamil Literature", *Proceedings of the Second International Conference Seminar on Tamil Studies, Vol. I*, Madras.

Also in *Four Papers on Literature and Linguistics*, Department of Linguistics, University of Kerala.

1969

66. "A method for Cognate Language Teaching (Tamil, Malayalam, Kannada and Telugu)", University of Kerala.
67. "Malayalam", *Current Trends in Linguistics*, Vol. 5.
68. "Pancatantra and Cilappathikaaram", *Mysore Orientalist*, Vol. II No. I, pp. 1-6.
69. Foreword to *Culture of the Ancient Cheras - A treatise on cultural reconstruction* by M.E. Manickavasagam Pillai, Manjula Publication, Kovilpatti, 1970, pp. I-IV.
70. *Dialect Survey of the Ezhava/Tüiyas*. Department of Linguistics, University of Kerala.
71. "Linguistics and Poetry", Indian Institute of Advanced Study, Simla.
72. *Papers relating to the Experimental Course in a South Indian Language*, Department of Linguistics, University of Kerala.
73. "The Dating of Sangam Literature", *Proceedings of the Third International Conference Seminar on Tamil Studies*, Paris, Vol. I.
74. Introduction to the book *Thirukkural Meerkol Vilakkam* by Dr. A. Dhamodharan (Tamil), South Asian Institute, University of Heidelberg, West Germany, pp. 1-17.
75. *Grammatical Dating of Kannassa Ramayanam and Krishna Gatha*, Prathibbanam, Thiruvananthapuram.

1971

76. "History of Tamil", First All India Conference of Dravidian Linguists, Trivandrum, pp. 37-38. Also in First Conference of Dravidian Linguists Souvenir, Trivandrum.
77. Publication Note to *Malayalam: An Intensive Course*, A.P. Andrews Kutty, p. 110.
78. "Language Building Activities in Kerala 1971", First All India Conference of Dravidian Linguists, Trivandrum, pp. 1-2.
79. Publication Note to *Telugu: An Intensive Course*, N. Sivaramamurthy, p. 110.
80. "Malayalam Phonological Rules", Autumn Seminar - Linguistics, Kurukshetra University.

1972

81. (Editor), *Proceedings of the First All India Conference of Dravidian Linguists*. Dravidian Linguistics Association, Trivandrum. Crown 1/4, pp. 556, Rs. 40/- (US\$ 10/-).
82. "Bilingual poetry in Malayalam - Phonological Changes", Conference on Bilingualism in South India, The American Institute of Indian Studies, Madras.
83. "Extension of typology to succession stage in a single language", *Second All India Conference of Dravidian Linguists*, Tirupati.
84. "Periodization in the History of Malayalam", *Proceedings of the All India Conference of Dravidian Linguists*, Trivandrum, pp. 528-531.
85. Introduction to the book *Introduction to the Study of Indian Folklore* by P.R. Subramanian, Tuticorin.
86. "Rules of Nasal Assimilation in Malayalam", *IJDL*, Vol. 1 No. 1, January, pp. 137-143, Thiruvananthapuram.

1973

87. Introducing Language of Middle Malayalam in the book *Language of Middle Malayalam* by Puthusseri Ramachandran, Dravidian Linguistics Association.

88. *Debates on the Grammatical Theories in Dravidian*, Dravidian Linguistics Association, Trivandrum, Demy 1/8, pp. 29 + xxiv, Rs. 6/- (US\$ 1.50/-).
Tamil translation by V. Jayadevan & P. Veerappan, Anbu Noolagam, Madras, pp. 48.
89. "Discussion on Enunciative Vowel", Bright William, *IJDL*, Vol. II No. 1, January, pp. 53-55.
90. Foreword to *Description of Emad Dialect of Malayalam*, G. Kesava Panikkar.
91. Editor, *International Journal of Dravidian Linguistics* (IJDL), since its inception in January 1972, Trivandrum, University of Kerala, Rev. by Zvelebil, K., *IJL* 15. 1, pp. 78-80.
92. Editor (with others), *1971 Proceedings of the First All India Conference of Linguists*, Trivandrum, Dravidian Linguistics Association, 1972, Reviewed by Vaidyanathan, S. in *IJDL*.2.1, pp. 162-167.
93. Editor (with P. Somasekharan Nair & B. Gopinathan Nair), *Seminar on Dialectology*, Papers and discussions, Dravidian Linguistics Association, pp. 119, Rs. 12/- (US\$ 3/-).
94. *Tamil - An Intensive Course* (with Veeraswamy), Dravidian Linguistics Association, pp. 125, Rs. 6/- (US\$ 1.50/-).
95. "The Development of pre-Malayalam *ai", *Ganapathy Pillai's Commemoration Volume*, Ceylon.

1974

96. *Bhaṣayum Paṭhanavum* (Malayalam), Department of Linguistics, University of Kerala. Reprint 2007, Current Books, pp. 146. Rs. 75/-.
97. *Dialect Survey of Malayalam - Ezhava/Tiya*, Department of Linguistics, University of Kerala.
98. *Tirāviṭac collurpatti akarāti, Vanchinadu Ona Malar*.

1975

99. "Extension of Typology to successive stages in a single Language", *Proceedings of the Second All India Conference of Dravidian Linguists*, Dravidian Linguistics Association.

100. Preface to the *Proceedings of the Second All India Conference of Dravidian Linguists*, G.N. Reddy & P. Somasekharan Nair (Eds.)
101. "Problems facing the education of Tribals and the members of the Harijan and Backward communities", Seminar on Methods in Language Teaching, Department of Linguistics, University of Kerala.
102. "The Generation of Alapetai Forms in Early Tamil", *IJDL* Vol. IV No. 1, January, pp. 105-111.

1976

103. Foreword to *A Linguistic Study of Early Manippravalam*, K. Retnamma.
104. "Gender in Hindi - A Pedagogical Point of View" (with H. Parameswaran), *IJDL* Vol. V No. 1, January, pp. 154-163.
105. Obituary Note on S. Bhattacharya, *IJDL* Vol. V No. 1, January, p. 202.
106. (et al), A Note by the DLA to *Study of Dialects in Inscriptional Tamil*, A. Velupillai.
107. "Planning for the Education of Tribals", *National Seminar on Tribal Education, Tribal Culture and Tribal Development*, Calicut.
108. (et al), A Note by the DLA to *The Tribal Languages of Southern Kerala*, S. Bhattacharya.
109. "Seminar Papers in Linguistics", *IJDL* Vol. V No. 2, June, pp. 397-402.
110. "Seminar Papers in Linguistics (Problems and Perspectives in Linguistic Studies)", *IJDL* Vol. V No. 2, June, pp. 403-409.
111. "Two Problems in Dialectology", *Studies in Dialectology* I (1), pp. 74-83.

1977

112. "A Note on the preservation of Mother Tongue in Kerala", (Eds.) G.P. Sharma & S. Kumar, pp. 21-33.
113. "MalayalattinRe Pūrva caritram", *Malayala Sahityam*, Trivandrum.
114. "National Seminar on Tribal Education, Tribal Culture and Tribal Development" (with P.R.G. Mathur) held at Calicut, Kerala, *IJDL* Vol. VI No. 2, June, pp. 379-385.
115. Obituary Note on Prof. Sunitikumar Chatterji, *IJDL* Vol. VI No. 2, June, p. 420.

116. "Speech Variation and Social Stratification", *IJDL* Vol. VI No. 2, June, pp. 245-255.
117. "Variables for the retention of Language among the Tribals", *Seminar on Sociolinguistics*, Telugu Academy, Hyderabad, pp. 133-144.

1978.

118. Editor (with B. Gopinathan Nair), *Pioneers in Linguistic Series I*, L.V. Ramaswamy Iyer & Seshagiri Prabhu, Demy Crown 1/8, pp. 74, Rs. 12/- (US\$ 3/-).
119. "The contribution of L.V.R. to Comparative and Historical Methods in Dravidian", *IJDL* Vol. VII No. 1, January, pp. 5-11.

1979

120. Subramanian's reply to D.P. Pattanayak: "India has not only North and South, but also East and West", *DLA News* Vol. 3, March.
121. "'North vs. South disaffection of Language Minorities", *DLA News* Vol. III, July.
122. "Present Tense Markers in Malayalam", *IJDL* Vol. VIII No. 2, June, pp. 249-259.
123. "Seminar on Brain Development and its implication on Teaching of Language and Linguistics - (Proceedings, 1977, 24-27 December), *IJDL* Vol. VIII No. 2, June, pp. 371-380.
124. (et al), A Note by the DLA to *Foreign Models in Tamil Grammar*, T.P. Meenakshisundaram.
125. "The Proceedings of the Eighth All India Conference of Dravidian Linguists held at the Madurai University, Madurai - A Report", *IJDL* Vol. VIII No. 2, pp. 362-370.
126. "V.I. Subramoniam replies to D.P. Pattanayak", *DLA News* Vol. III, May, pp. 1-2.
127. "Installation of Sonograph for the Study of Speech", *DLA News* Vol. III, June.

128. Presidential Address, *First All India Conference of the Place Name Society of India* held under the auspices of the Rashtra Kavi Govinda Pai Research Institute at Udupi.
129. "Linguistic and Political Objectives of the country", Reply by V.I. Subramoniam, *DLA News* Vol. III, August.

1981

130. "Decennial Celebrations of the Dravidian Linguistics Association & Tenth International Conference of Dravidian Linguists" at New Delhi, 10-12 July 1980 - A Review, *IJDL* Vol. X No. 1, pp. 192-232.
131. "Dravidian languages and Academics in Japan", *DLA News* Vol. V No. 7, July, p. 2.
132. "Dr. N. Remesan", *DLA News* Vol. V No. 11, November, p. 2.
133. "Importance of Mother Tongue in Japanese Education - Universities in Japan - Student agitation in Japan", *DLA News* Vol. V No. 8, August, pp. 1-2.
134. "International School of Dravidian Linguistics - Foundation-Stone-Laying Ceremony on 9-5-1981 - A Report", *IJDL* Vol. X No. 2, June, pp. 461-464.
135. "Ultimate Unit of Thought" in P.C. Ganeshsundaram & B. Radhakrishna (Eds.), *Brain and Language (Seminar Papers)*, Crown 1/4, pp. 144.
136. "Mother tongue education and strengthening of Dravidian Studies in Japan", *DLA News* Vol. V.10, October, pp. 2-4; Vol. V.2, November, pp. 1-2.
137. "Negative Finite Verb in Malayalam", *IJDL* Vol. X No. 1, pp. 270-271.
138. "Report on the Seminar on Language, Culture and People of Pondicherry", *IJDL* Vol. X No. 1, pp. 233-242.
139. "Seminar on Gujarati Migrants outside Gujarat", *IJDL* Vol. X No. 1, pp. 243-251.

140. "Studies in Socio-cultural changes in rural villages in Tiruchirappalli District, Tamil Nadu No. 1", Book Review in *IJDL* Vol. X No. 2, pp. 456-460.
141. "Ultimate Unit of Thought", *IJDL* Vol. X No. 2, June, pp. 282-287.

1982

142. "We encourage the Linguists to get from their best? Are we playing a significant role in the nation-building activities?", (An old letter from Prof. V.I. Subramoniam), *DLA News* Vol. VI.1, January, pp. 1-4.
143. "Chera, Kerala and Malayalam", *DLA News* Vol. VI.2, November, p. 2.
144. "Discussion on the Strengthening of Dravidian Studies in Japan", *IJDL* Vol. XI.2, pp. 356-366.
145. "Prof. Filliozat", *DLA News* Vol. VI.12, December, p. 1.

1983

146. "Dr. George Jacob", *DLA News* Vol. VII.1, p. 1.
147. "Language Planning in India", *DLA News* Vol. VII.6, pp. 1-2.
148. "Multilanguage Policy as a Strength to the Nation", *DLA News*, Vol. VII.7, July.

1984

149. "Padmasri to Sooranad Kunjan Pillai", *DLA News*, Vol. VIII.2, February, pp. 1-2.
150. "Centre should be National before asking the States to be National", *DLA News* Vol. VIII.4, April, p. 1.
151. "Welcome to a New Journal", *DLA News* Vol. VIII.7, July, p. 4.

1985

152. (et al as Project Principal Investigator), Report on the Project *Exploring the Causes for the Preservation or Loss of Language in India*, sponsored by ICSSR, New Delhi through ISDL, Trivandrum.
153. "Siddheshwar Varma", *DLA News* Vol. IX, November, p. 1.

1986

154. "Let us Reorient Ourselves", Address of the General President, 33rd All India Oriental Conference held at Asiatic Society, Calcutta, 24-26 October 1986, *IJDL* Vol. XV No. 2, pp. 264-272.
155. "Passing away of T. Burrow", *DLA News* Vol. IX.8, August, p. 1.
156. "Reprints Published - The Tamilian Antiquary", *DLA News* Vol. IX.10, October, p. 4.
157. Note on "Our Language Problem" by M.K. Gandhi.
158. "Vemana and Sarvanja, A Comparative Study written by Appa Rao, G.", (Review), *IJDL* Vol. XV No. 2, pp. 338-339.

1987

159. Subramoniam, V.I. (Review). 'Bhasha Patanangal' written by C.L. Antony, 1980. *IJDL* Vol. 16, No. 1, January, pp. 160-164. Thiruvananthapuram.
160. Subramoniam, V.I. *Language Multiplicity and Ancient Races in India*. Mysore: Central Institute of Indian Languages. India.
161. "Obituary of Dr. K. Raghavan Pillai", *DLA News* Vol. 11.5.May.
162. "Institute of Indology at Stake", *DLA News* Vol. 11.7,8.July, August.
163. "International Seminar on South Indian Contribution to Indian Philosoph"y, *DLA News* Vol. 11.9.September
164. "Spell of the South", *DLA News* Vol. 11.10.October

1988

165. "Report on the Seminar on the South Indian Contribution to Indian Philosophy", *IJDL* Vol. 17, No. 1, January, pp. 166-173, Thiruvananthapuram.
166. (Report), "The International Seminar on Dravidian Linguistics and the Fourteenth All India Conference of Dravidian Linguists", *IJDL* Vol. 17, No. 1, January, pp. 163-165, Thiruvananthapuram.
167. "Report of C. Subrahmaniam on Language Policy".

168. "AIIS Newsletter", *DLA News* Vol.12.7,8.July, August.
169. "About the *Encyclopaedia of Asian History*" (4 volumes), *DLA News* Vol.12.10.October.
170. Asiatic Society, New York, 1988, *DLA News* Vol.12.10.October.
171. *Encyclopaedia of Asian History* (continued), *DLA News* Vol. 12.12.December.
172. Obituary - Prof. A. Arulappan, *DLA News* Vol.12.12.December.

1989

173. (Review), "An Encyclopaedia of Indian Archaeology" written by A. Ghosh (Vols. I & II), 1989. *IJDL* Vol. 18, No. 1, January, pp. 124-127, Thiruvananthapuram.
174. "Developments in Linguistics", *IJDL* Vol. 18, No. 2, June, pp. 128-133, Thiruvananthapuram.
175. Foreword to *Proceedings of the I International Seminar and XIV All India Conference of Dravidian Linguists*, B. Gopinathan Nair (Ed.), Crown 1/4, pp. 265.
176. Review of "An Epic on Dravida Confluence" (V.K. Gokhale), *DLA News* Vol.13.1.January.
177. "The National University for Dravidian Studies: Memorandum finalised", *DLA News* Vol.13.2.February.
178. About the book *Two Tamil Folk Talks* by Kamil V. Zvelebil and Motilal Banarsidass, *DLA News* Vol.13.3.March.
179. About the "17th Annual Conference", Manipal, Udupi, SK dated 11-13 May 1989, *DLA News* Vol.13.4.April.
180. "Passing away of Prof. V.Sp. Manickam", *DLA News* Vol.13.5.May.
181. About "Manipal 17th Conference", *DLA News* Vol.13.6.June.
182. Obituary - Dr. K.D. Thirunavukkarasu, *DLA News* Vol.13.6.June.

183. Review History of Kolar Gold Field (K.S. Sitaram), *DLA News* Vol.13.7.July.
184. "Passing away of A. Amritalingam", *DLA News* Vol.13.8.August.
185. Obituary - G.N. Reddy, *DLA News* Vol.13.8.August.

1990

186. (Review), "Jain Inscriptions in Tamil Nadu", Topographical list by Ekambaranatham and Dr. C.K. Sivaprakasam, 1987. *IJDL* Vol. 19, No. 1, January, pp. 145-148, Thiruvananthapuram.
187. (Ed.), *Dravidian Encyclopaedia* Vol. I, HB, Demy 1/4, pp. xvi + 658 + 60, Rs. 500/- (US\$ 180/-).
188. "Some Crisp Comments by the Chairperson Prof. VIS during the discussion on the achievements, problems and prospects in the field of Linguistics held by the delegates on 19th April 1990", *DLA News* Vol.14.6.June.
189. Notes on *Encyclopaedia of Language*, David Crystal (Ed.), Cambridge University, 1989, *DLA News* Vol.14.10.October.
190. "Sociolinguistics: An International Handbook of the Science of Language and Society in English and German", 1987, *DLA News* Vol.14.10.October.

1991

191. "S.M. Katre - The Doyen of Linguistic Studies in India", *Bulletin of the Deccan College Postgraduate & Research Institute*, Vols. 51, 52, pp. 91, 92, Pune.
192. "Chera Coins - New Finds", *DLA News* Vol.15.1.January.
193. Felicitation by VIS during the Inauguration of the Tribal Research Centre, *DLA News* Vol.15.2.February.
194. About the book *Lesser Known Tribes of North West India and Pakistan*, compiled by H.A. Rose ICS based on the Census Reports of 1883 and 1892, *DLA News* Vol.15.3.March.
195. "On the death of Mr. Rajiv Gandhi", *DLA News* Vol.15.6.June.
196. "Passing away of Dr. V.K.R.V. Rao", *DLA News* Vol.15.8.August.

197. Quotes by Prof. VIS while the foundation stone for Panini building was laid, *DLA News* Vol.15.10.October.
198. About the book *Lexicography* by Gregory James, Major Series No. 40, Niemeyer Tubingen, 1991, DM 128, *DLA News* Vol.15.12. December.
199. Release of Kriya's *Modern Tamil English Dictionary*, *DLA News* Vol.15.12.December.

1992

200. "On the Teaching of Dravidian Languages", *The Administrator* Vol. 37 (October - December), pp. 125-129.
201. Appearance of the *International Encyclopaedia of Linguistics*, *DLA News* Vol.16.2.February.
202. About "A World Index of Old Tamil Cankam Literature" by T. Lehman and T. Malten, Franz Steiner, *DLA News* Vol.16.3.March.
203. On "Emil Sieg, his bibliography" by K.L. Janert, Franz Steiner, Verlag, Stuttgart, 199D 110, *DLA News* Vol.16.3.March.
204. Obituary - Sukumar Sen, *DLA News* Vol.16.3.March.
205. "Varna: Not that of the Aryans or Dravidians", *DLA News* Vol.16. 5.May.
206. About *The Indo-Aryan Language*, Colin P. Masica, Cambridge Language Survey, 1991, *DLA News* Vol.16.5.May.
207. "Passing away of R.N. Srivastava", *DLA News* Vol.16.10.October.
208. Obituary of Mrs. Jothi Venkatachellum, *DLA News* Vol.16.12. December.
209. "Prof. Gill on Linguistic Survey", *DLA News* Vol.16.12.December.

1993

210. (Ed.), *Dravidian Encyclopaedia* Vol. II, HB, Demy 1/4, pp. xvi + 842 + vii + lx, Rs. 900/- (US\$ 200/-).
211. Foreword to *Language Acquisition: Theory and Practice*, V. Syamala, HB, Demy 1/8, pp. xi + 265 + x.

212. Book review - *Hinduism at Cross Roads* by P.S.K. Pandian, *DLA News* Vol.17.4.April.
213. "International Seminar on Dravidian Studies and the Conference on Gundert from 18th to 22nd of May 1993 at Stuttgart: A Stimulating Experience", *DLA News* Vol.17.6.June.
214. On the *Encyclopaedia of Dravidian Tribes*, *DLA News* Vol.17.7.July.
215. *A Study of Place Names of Bapatha Taluk* of Dr. B.A. Lincoln, 1992, Guntur, Rs. 100/-, *DLA News* Vol.17.9.September.
216. "Brain & Language: Another Seminar" from November 11th to 13th, 1993 (by VIS and P.K. Mohan), *DLA News* Vol.17.10.October.
217. About the Felicitation Volume for Prof. S.M. Katre, BDCRI, Vols. 51-52, 1991-1992, Deccan College, Poona, *DLA News* Vol.17.11. November.

1994

218. (et al.), *Observations of the ISDL on Brain and Language (Seminar Proceedings)*, P.A. Suresh, Annie Monsy & S. Maya (Eds.), HB, Demy 1/8, pp. xiv + 214.
219. *Introduction to Automatic Translation (Seminar Proceedings)*, Harikumar Basi (Ed.), HB, Demy 1/4, pp. viii + 200.
220. *Introduction to Early Inscriptional Malayalam*, K. Retnamma, Demy 1/4, pp. 326.
221. Suggestions for IJDL Silver Jubilee Celebrations - T. Madhava Menon, K. Rangan, VIS, *DLA News* Vol.18.2.February.
222. Obituary of Prof. Venkataramaiah, *DLA News* Vol.18.2.February.
223. About the book *Central Dravidian Comparative Morphology* - B. Suvarchala, *DLA News* Vol.18.6.June.
224. *Conversational Sanskrit, Conversational Telugu, Conversational Kannada* - N.D. Krishnamoorthy, *DLA News* Vol.18.6.June.
225. *Hegemony of English* - Hans R. Dua, *DLA News* Vol.18.6.June.

226. Linguistic Students have Job Openings, *DLA News* Vol.18.8.August.
227. "Prof. Manual's gesture", *DLA News* Vol.18.8.August.
228. "Prof. Householder passed away", *DLA News* Vol.18.8.August.
229. *A Comparative Grammar of the Tibeto-Himalayan Languages* (D.D. Sharma), *DLA News* Vol.18.8.August.
230. "Prof. Manuel Passed Away", *DLA News* Vol.18.12.December.
231. "Passing away of K.V. Puttappa", *DLA News* Vol.18.12.December.

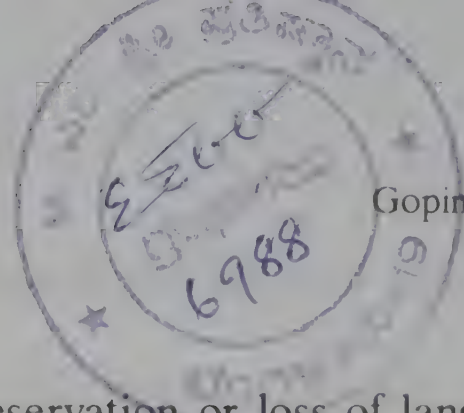
1995

232. Introduction to *Points of Contact between Prakrit and Malayalam*, M.P. Sankunni Nair, HB, Demy 1/8, pp. viii + 244.
233. "A Giant in Malayalam passes away" (on the death of Sooranad Kunjan Pillai), *DLA News* Vol.19.4.April.
234. Obituaries - P.N. Panicker, G. Ram Reddy, *DLA News* Vol.19.7.July.
235. "Visit of the Brahui scholar from Pakistan", *DLA News* Vol.19.8.August.
236. Travel Talks, *DLA News* Vol.19.11.November.

1996

237. Introduction to *A Handbook of Tamil Nadu*, K.M. Venkataramaiah (Ed.), HB, Demy 1/4, pp. vi + 556 + xiv.
238. Publisher's Note on *Caldwell and A.R. Raja Raja Varma on Malayalam Grammar*, K. Raghavan Pillai, Demy 1/8, pp. 168.
239. Preface to *Encyclopaedia of Dravidian Tribes* Vol. 1, T. Madhava Menon (Ed.), HB, Demy 1/4, pp. xx + 405.
240. Publisher's Note to *The Internal Conditioning of Phonological Systems*, Andre Martinet, HB, Demy 1/8, pp. x + 204.
241. Publisher's Note to *The Theories of Telugu Grammar*, Boduppalli Purushottam, HB, Demy 1/8, pp. xii + 410.
242. Obituaries - Prof. T. Donappa, Mr. Shanmugham, *DLA News* Vol. 20.10.October.

1997



243. "Exploring the causes for the preservation or loss of language in India (Report)", *IJDL* Vol. 26, No. 2, June, pp. 1-104, Thiruvananthapuram.
244. (Ed.), *Dravidian Encyclopaedia* Vol. III, HB, Demy 1/4, pp. viii + 864 + xlviii, Rs. 1,340/- (US\$ 200/-).
245. Preface to *Encyclopaedia of Dravidian Tribes* Vol. III, T. Madhava Menon (Ed.), HB, Demy 1/4, pp. xii + 347, ISDL, Thiruvananthapuram.
246. "India needs not less than two thousand trained Linguists for another five years", *DLA News* Vol.21.1.January.
247. "Two Elder Statesmen visited the ISDL Campus" - Sri. C. Subramaniam, former Governor of Maharashtra & Sri. Sadique Ali, President of the Gandhi Smarak Nidhi and Former Governor of Tamil Nadu, *DLA News* Vol.21.2.February.
248. "Meeting of Life Members at Chennai on 10-2-1997", *DLA News* Vol.21.2.February.
249. About the book *Avahotta and Comparative Vocabulary of New Indo-Aryan groups* by Touyoshi Nara, ISLCAA, Tokyo, Japan, *DLA News* Vol.21.6.June.
250. "Well-attended Silver Jubilee Celebrations of the DLA and the 25th Annual Conference", *DLA News* Vol.21.7.July.

1998

251. (Review), "Sangam Age Tamil Coins" written by R. Krishnamoorthy, 1997, *IJDL* Vol. 27, No. 2, June, pp. 135, 136, Thiruvananthapuram.
Convocation Address, Second Convocation held on 27th October 1998 at Deccan College Postgraduate and Research Institute, Pune.
252. Introduction to *A Handbook of West Bengal* Vol. I, Sanghamitra Saha (Ed.), HB, Demy 1/4, pp. x + 459.
253. "Passing away of a Stalwart in the literary scene of Kerala" (on P.T. Bhaskara Panikkar's obituary), *DLA News* Vol.22.1.January.
254. "Life members meet at Hyderabad on 4-3-1998", *DLA News* Vol.22.1.January.

255. Note on "A Ph.D. Thesis of 1930", London University, by S.C. Nandimath, *DLA News* Vol.22.1.January.
256. "A linguistic Giant passed away" (on the obituary of Prof. S.M. Katre), *DLA News* Vol.22.11.November.
257. "Visit of Dr. N. Mahalingam - Fond memories" (Excerpts from VIS' convocation address at DCPG&RI, Pune on 27-10-98), *DLA News* Vol.22.11.November.
258. "C.R. Sankaran is ill", *DLA News* Vol.22.11.November.
259. Obituary - R.C. Hiremath, *DLA News* Vol.22.11.November.

1999

260. (Review), "Karna Moksham" written by Hanne M. De Bruin, 1998, *IJDL* Vol. 28, No. 2, June, pp. 143, 144, Thiruvananthapuram.
261. "On the Teaching of Dravidian Languages", *IJDL* Vol. 28, No. 1, January, pp. 99-104, Thiruvananthapuram.

Convocation Speech, Fifth Convocation of Kannada University, The Director, Prasaraṅga, Kannada University, Hampi, pp. 1-9, Vidyaṛaṅga, Karnataka.
262. Introduction to *A Handbook of West Bengal* Vol. II, Sanghamitra Saha (Ed.), HB, Demy 1/4, pp. xii + 436 + xl.
263. (et al.), Foreword to *Kerala Paaniniyam of A.R. Raja Raja Varma*, C.J. Roy (Tr.), HB, Demy 1/8, pp. xxviii + 332.
264. Book Review - *Kannada Onomastics* by Dr. M.M. Kalburgi, Mysore, The Place Name Society of India, 1997, *DLA News* Vol.23.1.January.
265. "Charles Ferguson passed away", *DLA News* Vol.23.2.February.
266. "The Greater Oxford Dictionary and a Mad killer", *DLA News* Vol.23.3.March.
267. "Three Books in Tamil", *DLA News* Vol.23.4.April.
268. Obituary - K.C. Sankaranarayanan, *DLA News* Vol.23.4.April.
269. "Ranganayaki Mahapatra's Books", *DLA News* Vol.23.5.May.

270. Book Review - *Recent Research in Paniniyan Studies* - G. Cardona, Motilal Banarsidass, 1999, *DLA News* Vol.23.6.June.
271. "27th All India Conference of Dravidian Linguists - A quick look", *DLA News* Vol.23.7.July.
272. "Address of Bharat Ratna Dr. C. Subramaniam on the Second Founding Day of the Dravidian University", *DLA News* Vol.23.11. November.

2000

273. (Review), "Literary Criticism in Tamil and Sanskrit" written by K. Meenakshi, 1999, *IJDL* Vol. 29, No. 2, June, pp. 167, 168, Thiruvananthapuram.
274. Introduction to *A Handbook of Kerala* Vol. I, T. Madhava Menon (Ed.), HB, Demy 1/4, pp. xii + 373.
275. Foreword to *Progress of Phonology*, T. Vasanthakumari, Demy 1/8, pp. xiv + 189.
276. Foreword to *Speech Technology: Issues and Implications in Indian Languages*, K. Nagamma Reddy (Ed.), HB, Demy 1/8, pp. xxviii + 298.
277. "Murasoli Award", *DLA News* Vol.24.1.January.
278. "Sad to Read" (about the need for linguistic knowledge in the study of brain, archaeology, prehistory, proto-culture, seasonal change, linguistics, etc.), *DLA News* Vol.24.3.March.
279. "28th AICDL", *DLA News* Vol.24.5.May.
- "Bishop Caldwell", *DLA News* Vol.24.5.May.
- "Sorrow on the death of Dr. Somasekharan Nair", *DLA News* Vol.24.5.May.
280. Review - *The Yearbook of South Asian Languages and Linguistics*, *DLA News* Vol.24.6.June.
281. Obituary - Nanjil K. Mohanan, *DLA News* Vol.24.8.August.
282. "Reference to Prof. Anvita Abbi, Prof. D.D. Sharma of Punjab and Sir Denys De Saumareg Bray" (request for his photograph), *DLA News* Vol.24.10.October.

283. "C. Subramaniam passes away", *DLA News* Vol.24.11.November.
284. "Visit to Tidal Park and Elcot Software", *DLA News* Vol.24.11.November.
285. "Review at Jadavpur University, Calcutta", *DLA News* Vol.24.12.December.

2001

286. (Review), "Tamil Nadaikkaiyetu" written by P.R. Subrahmaniam et al, 2001, *IJDL* Vol. 30, No. 2, June, pp. 255, 256, Thiruvananthapuram.
287. Introduction to *A Linguist visits Bangladesh*, Sanghamitra Saha, PB, Demy 1/8, pp. iv + 96.
288. Preface to *Theology of the Saivagamas: A Survey of the Doctrines of Saiva Siddhanta and Veerasaivism*, S.C. Nandimath, HB, Demy 1/8, pp. xii + 440.
289. "Homage to C. Subramaniam", *DLA News* Vol.25.1.January.
290. Obituary - Elias Valentine, *DLA News* Vol.25.1.January.
291. "K.L. Pike passed away", *DLA News* Vol.25.2.February.
292. "A Note on Matriarchy", *DLA News* Vol.25.3.March.
293. "Visit to the Temple at Tiruvorriyur", *DLA News* Vol.25.3.March.
294. *Mandela*, a book by Little Brown and Boston, 1996, *DLA News* Vol.25.5.May.
295. "Sadiq Ali passed away", *DLA News* Vol.25.5.May.
296. "Obituary of Edgar Polome", *DLA News* Vol.25.6.June.
297. "Proposals for the Silver Jubilee Celebrations of the ISDL", *DLA News* Vol.25.9.September.
298. Review - Patel Institute of English Training & Research, Vallabh Vidyanagar, Gujarat, *DLA News* Vol.25.9.September.

299. Obituary - K. Vijaya Bhaskara Reddy, *DLA News* Vol.25.10.October.
300. "Remember the first World Conference of Malayalam conducted from 1-7-1977", *DLA News* Vol.25.12.December.

2002.

301. (Write-up), "Silver Jubilee Review of ISDL (12-2-1977 to 11-2-2001)", *IJDL* Vol. 31, No. 1, January, pp. i-cxliii, Thiruvananthapuram.
302. "A Note on the -are person number marking suffix in Gundert's writing", Paper presented in the 30th All India Conference of Dravidian Linguists at Dharwad, Karnataka from 11-13 November 2002.
303. Preface to *In Quest of Dravidian Roots in South Africa*, M.V. Krishnaswamy, ISDL, Thiruvananthapuram.
304. Preface to *A Handbook of Kerala* Vol. II, T. Madhava Menon (Ed.), HB, Demy 1/4, pp. xii + 497 + xxxiv.
305. Introduction to *Ba:lavya:karanamu of Paravastu Cinnaya Suri*, P.S. Subrahmanyam (Tr.), HB, pp. iv + xiiv + 382.
306. "Linguists in danger in India", *DLA News* Vol.26.4.April.
307. Institute of Indian studies, Philosophical faculty, Charles University, Prague, Czechoslovakia, *DLA News* Vol.26.5.May.
308. "About Halasya Mahatmyam in Kerala", *DLA News* Vol.26.7.July.
309. "Deccan College (Pune) on the Decline", *DLA News* Vol.26.8.August.
- "Political Adhocism Runs Riot", *The New Indian Express* write-up by Triveni Nagarajan dated 7th July 2002, *DLA News* Vol.26.8. August.
310. Field workers in Orissa-Bengal borders; The Challenge in a far-off place; The Kindness of Unknown faces; The Questionnaire; Bystanders' Correction: 'Amarboli' Our speech form; More in the report, *DLA News* Vol.26.10.October.
311. "ISDL Visiting Fellow reports on South Africa", *DLA News* Vol.26.10.October.

2003

312. (Review), "Glimpses of Sindhi Language" written by P.J. Gidwani, Pune, Sri. Prem M. Adwani, August 2001, *IJDL* Vol. 36, No. 2, June, pp. 215, 216, Thiruvananthapuram.
313. (Short Review), "Prakriya Sarvasvam by Narayana Bhatta: A Critical Study" written by S. Venkatasubramonia Iyer, 1972, *IJDL* Vol. 32, No. 2, June, p. 249. Thiruvananthapuram.
314. (Short Review), "Munda Substratum of Tibeto-Himalayan Languages" written by D.D. Sharma, 2003, *IJDL* Vol. 32, No. 2, June, pp. 249, 250, Thiruvananthapuram.
315. (Short Review), "Source and Time" written by F. Grimal (Ed.), 1997, *IJDL* Vol. 32, No. 2, June, p. 250, Thiruvananthapuram.
316. "A short Note on c/s > t Change", *IJDL* Vol. 32, No. 2, June, pp. 185, 186, Thiruvananthapuram.
317. *A Descriptive Analysis of a Dialect of Tamil*, HB, Demy 1/8, pp. xiv + 85, Rs. 170/- (US\$ 17/-).
318. Introduction to *Gundert: Kerala Pazhama*, T. Madhava Menon (Tr.), PB, Demy 1/4, pp. x + 88.
319. Preface to *Gundert: Keralolpatti*, T. Madhava Menon (Tr.), PB, Demy 1/4, pp. vi + 132.
320. Foreword to *Nandinagari Script*, P. Visalakshy, HB, pp. x + 282.
321. "Temple Symposium", *DLA News* Vol.27.3.March.
322. "The Plight of a Remarkable Scholar, K.S. Singh", *DLA News* Vol.27.5.May.
323. Summary of the Tamil paper on the Inscriptions of Udaya Marthanda by Dr. M. Centil Selvakumaran, T.A.D., Tirunelveli, read in the seminar on Temples at Ceran Mahadevi on 15-12-2003, *DLA News* Vol.27.5.May.
324. "A.M. Ghatage passed away", *DLA News* Vol.27.6.June.

325. "New Wind blows in Linguistics" (Brain and Language, Neurolinguistics attract researchers in Linguistics and Cognitive Psychology), *DLA News* Vol.27.6.June.
326. "Efforts made from 1980-s to study Orissa and Oriya language", *DLA News* Vol.27.6.June.
327. "Advaita Linguistics", *DLA News* Vol.27.7.July.
328. "Encyclopaedia of Indo-Aryan Languages", *DLA News* Vol.27.8. August.
329. Book Review - *Narrinai* A. Dakshinamurthy (Tr.), Chennai, Indian Institute of Tamil Studies. *DLA News* Vol.27.9.September.
330. "September 11th Holocaust: An East Indian response and Unshed tears", *DLA News* Vol.27.10.October.
331. "Prof. Kuiper passed away on 14th November 2003 at Leiden", *DLA News* Vol.27.12.December.

2004

332. (Review), "Sociology of Bhojpuri Language" written by R.B. Misra, *IJDL* Vol. 32, No. 1, January, pp. 161, 162.
333. "Report of the 31st All India Conference of Dravidian Linguists, 19-21 June 2003", *IJDL* Vol. 33, No. 1, January, pp. 223-228, Thiruvananthapuram.
334. Preface to *Katantravyakarana of Acaryasaravavarna*, Samir Karmakar (Tr.), PB, Demy 1/4, pp. 10 + 246.
335. "Variations in Readings in the Sutras and Annotation", *Linguistic Interpretation of Liilathilakam* Vol. II (Index), A.R. Gopala Pillai, Demy 1/8, pp. xiv + 663.
336. Foreword to *Mugdhabodham Vyakaranam* by Vopadeva, Nairrita Bhattacharya (Tr.), PB, Demy 1/4, pp. 38 + 361.
337. "Visit to Ambasamudram and nearby Chingampatti", *DLA News* Vol.28.1.January.

338. "The Cricketer Dravid and Dravidian", *DLA News* Vol.28.2.February.
339. "Intimate Chats with students from Meghalaya", *DLA News* Vol.28.2.February. *
340. "Prof. C.R. Sankaran", *DLA News* Vol.28.4.April.
341. "On *Lilatilakam*: The Earliest Malayalam Grammar", *DLA News* Vol.28.5.May.
342. "E.K. Nayanar passed away on 18-5-2004 at Delhi", *DLA News* Vol.28.6.June.
343. "C.R. Sankaran", *DLA News* Vol.28.7.July.
344. "Meeting Dr. Rama P. Coomarasamy", *DLA News* Vol.28.10.October.
345. "We condole the death of Dr. Thamizhkudimagan", *DLA News* Vol.28.10.October.
346. "Another face of Raja Ramanna", *DLA News* Vol.28.10.October.
347. "Sudden death of A.P. Andrews Kutty", *DLA News* Vol.28.11. November.
348. "Seminar on Numismatics on 1st and 2nd December 2004 at Madras", *DLA News* Vol.28.11.November.
349. "More on the Pedigree of LVR", *DLA News* Vol.28.11.November.
350. "Bengal Studies : A Proposal", *DLA News* Vol.28.11.November.

2005

351. "The Etymological Dictionary by T. Burrow and M.B. Emeneau", *IJDL* Vol. 34, No. 2, June, pp. 81-88, Thiruvananthapuram.
352. (Review), "The Pallava Coins" written by R. Krishnamoorthy, 2004, *IJDL* Vol. 34, No. 1, January, pp. 237, 238, Thiruvananthapuram.
353. (Review), "Valmiki's Sanskrit" written by L.A. Van Daalen, 2004, Indian Edition, Delhi, Motilal Banarsidass Publishers Pvt. Ltd.,

Originally published by Brill Leiden, *IJDL* Vol. 34, No. 1, January, pp. 235, Thiruvananthapuram.

354. "P.V. Narasimha Rao passed away", *DLA News* Vol.29.1.January.
355. "Young Researchers invited to make use of the ISDL Library", *DLA News* Vol.29.1.January.
356. "J.N. Dikshit passed away", *DLA News* Vol.29.1.January.
357. "N. Sivarama Murthy passed away", *DLA News* Vol.29.2.February.
358. Review of Clinton's book *An Appreciation of my Life*, William J. Clinton, 2004, *DLA News* Vol.29.3.March.
359. Obituary - O.V. Vijayan, *DLA News* Vol.29.4.April.
360. Observations (on library books available), *DLA News* Vol.29.5.May.
361. "33rd All India Conference of Dravidian Linguists at Thiruvananthapuram from 16th to 18th June 2005 in the ISDL Rajaraja Varma Auditorium", *DLA News* Vol.29.7.July.
362. "Text-to-Speech Projects and Neglect of Linguistics in these projects", *DLA News* Vol.29.7.July.
363. "Scholars Invited (Belgium International Centre for Place Name Studies)", *DLA News* Vol.29.8.August.
364. "M.B. Emeneau remembered", *DLA News* Vol.29.9.September.
365. "*Linguistic Abstracts* Vol. 29 No. 3", *DLA News* Vol.29.9.September.
366. Obituary - S.K. Varma, *DLA News* Vol.29.9.September.
367. "Dr. B. Ramachandra Rao passed away", *DLA News* Vol.29.11. November.
368. "Dravidian script and Hon. Maran's announcement", *DLA News* Vol.29.11.November.
369. "K.R. Narayanan", *DLA News* Vol.29.12.December.

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370. "A Note on Gundert", *IJDL* Vol. 35, No. 2, June, pp. 125-127, Thiruvananthapuram.
371. "Morpheme and Phrase Boundaries in Tamil", *IJDL* Vol. 35, No. 1, January, pp. 221-226, Thiruvananthapuram.
372. (Directed by), Assisted by C.J. Roy, P. Somasekharan Nair, R.V.K. Thampuran & B. Gopinathan Nair, *Dialect Maps of Malayalam - Ezhava/Tiyya - Kerala*, Double Demy, pp. viii + 293.
373. Publisher's Note to *Linguistic Study of Brajabuli*, Mahidas Bhattacharya, Demy 1/8, pp. 18 + viii + 348.
374. "New Book on Brajabuli", *DLA News* Vol.30.1.January.
375. Book Review - *Goddess Hethe of the Nilgiri Badagas*, R.K. Haldorai, Nelikoln Publishing House, Udhagamandalam, *DLA News* Vol.30.1.January.
376. "Intensive Course in Functional Linguistics in ISDL", *DLA News* Vol.30.1.January.
377. "Visit to the Thiruvalluvar Statue at Kanyakumari", *DLA News* Vol.30.1.January.
378. "S.M. Katre remembered", *DLA News* Vol.30.1.January.
379. "Actor Rajkumar: Hon. D.Litt. function at the Kannada University at Hampi, Karnataka", *DLA News* Vol.30.5.May.
380. "Observations on V.S. Rajaram's Book *A Reference Grammar of Classical Tamil Poetry* (1992), *DLA News* Vol.30.11.November.

2007

381. "The Development of Pre Malayalam *ai", *IJDL* Vol. 36, No. 1, January, pp. 167-172, Thiruvananthapuram.
382. "Dialect Survey Work Abroad", Introduction from the book *Dialect Survey of Malayalam - (Ezhava - Tiyya)*, ISDL, pp. i-v, Thiruvananthapuram.
383. *Dialect Survey of Malayalam (Ezhava - Tiyya)*, HB, Demy 1/8, pp. 16 + 688 + 32 + 34, Rs. 365/- (US\$ 75/-).

384. Foreword to *Old Bengali Syntax*, S.K. Sen, PB, pp. 12 + 126.
385. A Message in the book *Dance and Music of South India*, V.S. Sharma, pp. 112, ISDL, Thiruvananthapuram.
386. "Seminar on Classical Language: Its Definition and Function", *DLA News* Vol.31.1.January.
387. "Students of Dialectology to note", *DLA News* Vol.31.1.January.
388. "Second Edition of *Dialect Survey of Malayalam (Ezhava-Tüya)*", *DLA News* Vol.31.3.March.
389. "Greek Scholar in ISDL" (Antonios Vasileiadis), *DLA News* Vol.31.4.April.
390. "*Polish-English-Tamil Dictionary*", *DLA News* Vol.31.10.October.
391. "Literary Theories in Tamil", *DLA News* Vol.31.11.November.

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392. "Origin of the Dravidian University", *IJDL* Vol. 37, No. 1, January, pp. 191-202, Thiruvananthapuram.
393. *Dialect Maps of Malayalam - Nair - Kerala*, Double Demy, pp. xx + 314.
394. Preface to *Collected Papers on Malayalam Language and Linguistics*, B. Gopinathan Nair (Ed.), HB, pp. viii + 584, ISDL, Thiruvananthapuram.
395. (Reprint), A Note by the DLA to *The History of the Grammatical Theories in Malayalam*, K.N. Ezhuthachan, HB, Demy 1/8, pp. 708, ISDL, Thiruvananthapuram.
396. Foreword to *Vanjikandam*, K. Ravindran, PB, Demy 1/8, pp. x + 205, ISDL, Thiruvananthapuram.
397. "Introducing the Volume on Dialect Survey Maps of Nairs", *Dialect Maps of Malayalam - Nair - Kerala*, Double Demy, pp. viii + 298, ISDL, Thiruvananthapuram.
398. "Expression of Gratitude", *Dialect Maps of Malayalam - Nair - Kerala*, Double Demy, pp. viii + 298, ISDL, Thiruvananthapuram.
399. "World Conference for Indian Linguists", *DLA News* Vol.32.4.April.

400. "Dr. K. Nagamma Reddy Endowment instituted in the DLA",
DLA News Vol.32.11.November.

2009

401. Foreword to *Phonological Reconstruction of South Dravidian Languages*, B. Gopinathan Nair, HB, Crown 1/4, pp. 480, ISDL, Thiruvananthapuram.

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K. Balachandran *Index to the International Journal of Dravidian Linguistics, Vol.1.1972 to Vol.20.1991*, pp. 92-145

R.B. Bindu *Index to the IJDL, Vol.27 No.2 (1988) to Vol.32 No.2 (2003), IJDL Vol.33 No.1*, pp. 229-239

Index to the IJDL, Vol.33 No.1 (2004) to Vol.37 No.2 (2008), IJDL Vol.38 No.1 (2009), pp. 219-239

D. Mano "Professor V.I. Subramoniam: A Bibliography" (till 1986) in *PLANS Bulletin*, 13 March 1986, pp. xv-xxviii.

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ADDITIONS TO THE ISDL LIBRARY

- Abdul Kalam, A.P.J. 2010. *The Scientific Indian*. India: Penguin Publishers.
- Amit Sarwal & Reema Sarwal. 2009. *Reading Down Under*. New Delhi: S.S.S. Publishers.
- Boris Wiseman. 2009. *Levi Strauss*. Cambridge University Press.
- Carol A. Angel. 2010. *Language Development and Disorders*. Boston: Jones & Bartlett.
- Pavan K. Varma. 2010. *Becoming Indian*. India: Penguin Books.
- Rajagopalan, L.S. 2010. *Temple Musical Instruments of Kerala*. New Delhi: Sangeetha Nataka Academy.
- Satyanarayana, Y.V. 2010. *Ethics: Theory and Practice*. New Delhi: Pearson.
- Simon Gikandi. 2009. *Encyclopaedia of African Literature*. London: Routledge.
- Subodh Gopal Nandi & Projit Kumar Palit. 2010. *Manuscript and Manuscriptology in India*. New Delhi: Kaveri.
- Terry Eagleton. 2008. *Literary Theory: An Introduction*. New Delhi: Wiley.
- Tim Bayne, Axel Cleeremans & Patrick Wilken. 2009. *The Oxford Companion to Consciousness*. Oxford University Press.
- Wendell V. Harris. 2010. *Dictionary of Concepts in Literary Criticism and Theory*. Jaipur: Rawat Publishers.

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